DRAFT CONSTRUCTION COMPLETION REPORT

CONTINENTAL DAM REHABILITATION PROJECT

DAM ID: 200110
HINSDALE COUNTY, COLORADO
WATER DIVISION 3
WATER DISTRICT 20

Prepared for

Santa Maria Reservoir Company
Monte Vista, CO 81144

May 2016

AECOM
6200 South Quebec Street
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Project No. 22243593

C-259C

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1.1 PURPOSE

URS Corporation (URS), is submitting this construction completion report on behalf of the Santa Maria Reservoir Company (SMRC). The report summarizes construction activities for the Continental Dam Rehabilitation Project (Project).

The Project included embankment rehabilitation related to seepage control and stability of the embankment, spillway improvements to replace the existing, deteriorating spillway, and installation of dam instrumentation. Refer to subsection 1.5 for a detailed description the Project components.

This report was prepared to meet the State of Colorado Rules and Regulations for Dam Safety and Dam Construction, Rule 10, Acceptance of Construction of Jurisdictional Dams (State of Colorado, 2007). In accordance with Rule 10, the final completion report includes:

- A summary of construction activities, changes, and problems encountered and solutions implemented to resolve the problems
- A summary of construction monitoring and material quality control (QC) testing
- Selected photographs of construction (included in Appendix A)

1.2 PROJECT LOCATION

Continental Reservoir and Dam are located in Hinsdale County, CO, approximately 8 miles southeast of the town of Lake City, CO, as shown on Figure 1-1.

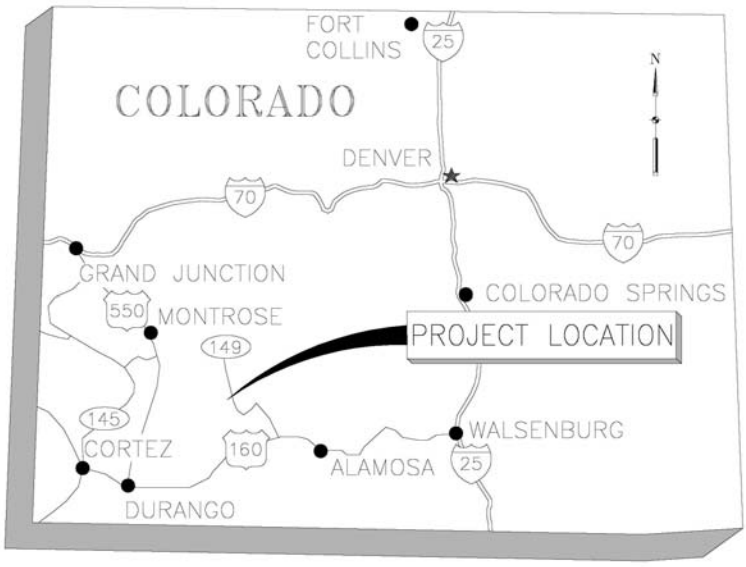


Figure 1-1: Location Map

The Project is located in Water Division 3, Water District 20, and the State of Colorado, Department of Natural Resources, Division of Water Resources, Office of the State Engineer (SEO) DAMID is 200110. SMRC owns, operates, and maintains Continental Dam, and primarily uses the reservoir for irrigation water storage.

1.3 BACKGROUND AND HISTORY

Continental Dam was initially designed in 1911, but was later redesigned and constructed between May 1925 and December 1928. The main dam is an earthen embankment with a puddle clay core. The puddle core extends vertically from a trench excavated in the bedrock foundation to the embankment crest. According to the 1926 as-build drawings, the embankment is founded on a layer of "boulders in sand" at El. 10,200 feet. The alluvial layer extends to the bedrock contact at approximate El. 10,181 feet, or 19 feet below the base of the embankment. The embankment is approximately 310-foot-long and 92-foot-high, as measured from the top of the alluvial layer, with an 18-foot-wide crest at maximum elevation (El.) 10,292 ± feet; the effective dam crest is at El. 10,290 feet.

In the original configuration, the upstream face was sloped at 3H:1V (horizontal to vertical) from the upstream heel to El. 10,270 feet, and 2.5H:1V from El. 10,270 to the crest. The upstream face was armored with 12-inch-thick riprap on 6-inch-thick bedding. The downstream slope is 2H:1V and armored with 12-inch-thick riprap.

A reinforced concrete core wall and grout curtain was installed at the dam/foundation contract and up the abutments, in the puddle core section along the dam centerline. A trench was excavated through the alluvial layer and a few feet into the bedrock, from where the base of the puddle core and concrete core wall extends. The puddle core and core wall extend to a maximum depth of El. 10,180 feet; a few feet below the invert of the original streambed. The core wall extends up the abutments to El. 10,245 and 10,287 feet at the right and left[1] abutments, respectively. The grout curtain, constructed of 14-foot-deep (as measured from the base of the cutoff wall drilled holes spaced at 3 feet, extends the full length of the cutoff wall. A secondary upstream puddle core, with a reinforced concrete cutoff wall and grout curtain was installed in a trench approximately 200 feet upstream of the dam centerline.

A drainage and seepage collection system comprising 4- and 6-inch-diameter vitrified clay pipes and a sand and gravel diaphragm was installed just downstream of the clay puddle core to collect seepage from the abutments and embankment. The collection system diverts seepage to lateral 6-inch-dianmeter vitrified clay collection pipes that divert the flow to a rockfill berm at the downstream toe of the embankment.

The original spillway comprised a 140-foot long concrete lined side channel with a discharge chute and dissipation basin was constructed along the right abutment in 1932. The spillway was demolished as part of this Project and replaced with a new concrete lined spillway, chute, and stilling basin.

The outlet works comprises a reinforced concrete intake structure with steel trash racks near the upstream toe. The intake is connected to a horseshoe-shaped, concrete lined outlet culvert that extends through the embankment, sloped at 1.9 percent in the downstream direction. The culvert is 4-foot-wide, 5-foot, 6-inch-tall section, with a 2-foot-diameter crown. The outlet conduit bifurcates to two parallel 3-foot-square conduits upstream of the crest centerline, before merging to a single conduit, downstream of the crest, with the same section dimension as the upstream section. Outlet flow is controlled by two parallel 3-foot-square slide gates, one in each of the square conduits of the bifurcation section. The gates are controlled from a gate house just

[1] Right and left defined looking downstream.

downstream of the crest, via a concrete linen access shaft that extends to the valve chamber located above the bifurcations section.

The outlet conduit originally terminated in a concrete outlet structure just downstream of the rock fill berm at the downstream toe, but at some point following original construction the outlet conduit was extended downstream by connecting a corrugated metal pipe (CMP) at the outlet structure. The CMP approximately 50 feet downstream from the original outlet structure and terminates in a reinforced concrete headwall, where outlet flows enter North Clear Creek.

A rehabilitation project in 1990 installed a lining system of filter fabric with anchor trenches at the left abutment, upstream of the dam crest. As part of this project, the upstream slope was re-graded to 3H:1V from the upstream heel to El. 10,261 feet; 4H:1V from El. 10,261 to 10,279 feet; and 2.5H:1V from El. 10,279 to the dam crest. Grouting of embankment voids adjacent to the outlet pipe and valve chamber was also done as part of this project.

1.4 PROJECT DATA

Project Datum and Survey Control

All elevations presented herein, unless otherwise noted, are based on the North American Vertical Datum, 1988 (NAVD1988).

Table 1-1 provides a brief summary of the pertinent data for Continental Dam and Table 1-2 provides a summary of Reservoir Data.

Table 1-1: Basic Dam Data

Project Feature	Value (feet)
Max Dam Crest Elevation	10,292 ±
Maximum Dam Height	92 ±
Dam Crest Width	18 ±
New Overflow Spillway Crest Elevation	10,280.0

Table 1-2: Basic Reservoir Data

Project Feature	Elevation (feet)	Reservoir Storage (AF)
Effective Dam Crest	10,290.0	30,700 ±
Spillway Crest	10,280.0	22,850 ±
Intake Invert	10,203.3 ±	N/A

1.5 PROJECT DESCRIPTION

The purpose of the Project described in this report was to implement dam safety modifications to mitigate embankment seepage issues and to rehabilitate the deteriorating spillway if order for the SEO to remove reservoir storage restrictions. The SEO File number for the Project is C-259C.

Project work began in May 2014 and was completed in November 2015. The prime construction contractor was Moltz Constructors, Inc. (MCI) of Castle Rock, CO. Engineering design and construction management was conducted by URS under an engineering services contract with the SMRC.

The Continental Reservoir Rehabilitation Project Design Report (URS, 2014) describes the work that was performed for the Project. The work included;

The embankment improvements included:

- Demolition of the existing left abutment drain below El 10,215 feet.
- Removal and stockpiling of existing riprap on the downstream slope.
- Re-grading of the downstream slope above El 10,215.0 feet to 2H:1V.
- Re-grading of the downstream slope between El. 10,193 and 10,215 feet to 1.5H:1V to expose the outlet works and partially remove the existing rock fill berm.
- Construction of a toe drain seepage collection system, comprising 18-inch-diameter HDPE slotted pipe within a drain gravel section.
- Construction of a filter blanket from the downstream toe to the invert of the outlet works conduit (approximate El. 10,139 feet) to prevent internal piping through the rock fill and along the conduit.
- Construction of a two-stage filter against the re-graded downstream slope.
- Placement of buttress fill on the two-stage filter. The buttress fill was placed to widen the existing (effective) crest by 15 feet at El. 10,290 feet with a 33-foot-wide bench at El. 10,265 feet.

The spillway improvements included:

- Partial demolition of the existing spillway.
- Construction of a new side channel spillway, chute and U.S. Bureau of Reclamation (Reclamation) Type II stilling basin along the right abutment. The spillway chute walls and slab were anchored to the adjacent ground with soil nail anchors, rock bolts, and foundation anchors.
- Construction of a spillway chute underdrain system comprising 8-inch-diameter HDPE pipe embedded in drain gravel and filter sand.

Dam Instrumentation:

- Installation of structural survey points on the reinforced concrete spillway
- Installation of movement monuments on the filter blanket
- Installation of two nested piezometers near the maximum embankment.

- Construction of a metering manhole on the toe drain pipe.
- Construction of a seepage metering manhole connected to the toe drain, located left of the existing outlet works headwall.
- Modifications of the existing piezometers to accommodate the revised grading on the downstream face of the embankment.

The Project also included seeding and reclaiming upon completion of the dam safety modifications work.

1.6 PROJECT PERSONNEL

The following key personnel were involved in the work:

- Mr. Matt Gavin P.E., Dam Safety Engineer, SEO.
- Mr. Jeremey Franz, P.E., Design Review Engineer, SEO.
- Mr. Ed Toms, P.E., Project Manager, URS
- Mr. Scott Jones, P.E., Engineer of Record, URS
- Ms. Christina Winckler, PE, Geotechnical Engineer, URS
- Mr. Joseph Owen, Resident Project Engineer (RPR), URS
- Mr. Aaron Neff. E.I.T, Alternate RPR, URS
- Mr. Thomas Moltz, Project Engineer, MCI
- Mr. Troy McDaniel, Superintendent, MCI
- Mr. Scott Canchola, Project Forman, MCI
- Mr. Bob Kukuk, Dam Caretaker, SMRC
- Mr. Jay Yeager, Superintendent, SMRC

The following major subcontractors and suppliers were used by MCI on the Project:

- Earthwork – ACA Products, Buena Vista, CO
- Anchor Drilling and Pull Testing – Rock Solid Solutions Corporation, Parachute, CO
- Instrumentation Installation – Colorado Engineering and Instrumentation, Arvada, CO
- Surveying– TOTL Surveys, Inc. Inc., Buena Vista, CO
- Concrete Supplier – Southwest Ready-Mix & Pumping, Alamosa, CO
- Reinforcing Steel Supplier – Dalco Industries, Denver, CO
- HDPE Pipe Supplier – Advanced Drainage Systems, Vancouver, WA
- Spillway Fence and Security Gates Supplier – Master Halco, Denver, CO
- Fabricated Steel Bridge Supplier – BIGR Bridge, Greely, CO
- Prefabricated Manhole Supplier –Tracom, Alpharetta, GA

Third party QC material testing was provided by:

- Western Technologies, Inc., Durango, CO (2014)
- Mountain Engineering and Testing, Monte Vista, CO (2015)

2.1 MOBILIZATION, PREPARATORY WORK, AND GENERAL SITE WORK

2.1.1 Season One — 2014

Season 1 (2014) Work was performed from the third week of May 2014 through the fourth week of November 2014. MCI began mobilization of heavy equipment, personnel, fuel tanks, and material to the site on May 19. Two mobile office trailers were set up for MCI and URS personnel. Staking was established around the boundary of the staging area within the five-acre limit delineated on the Drawings.

The U.S. Forest Services (USFS) granted approval and permits were processed on June 2, 2014.

The end of season walkthrough and acceptance was performed with the SEO, SMRC, Colorado Water Conversation Board (CWCB), USFS, and URS on Wednesday November 6.

2.1.2 Season Two — 2015

Season 2 (2015) Work was performed from the first week of June 2015 through the end of October 2015. Preparatory work included re-mobilization of personnel, equipment, and materials to the site.

Demobilization and reclamation of the job site and man camp areas were performed in October 2015.

A substantial completion walkthrough with the SEO, SMRC, CWCB, USFS, and URS was performed Wednesday, October 14, 2015, and a punch list was generated. Conditional approval to partially fill the reservoir to El. 10,268.9 feet was granted by the SEO in a letter dated October 1, 2015. This letter required completion of several items related to the intake structure, piezometers, and monuments, all which were consequently completed.

2.2 EROSION AND SEDIMENT CONTROL

2.2.1 Season One — 2014

During June 2014, MCI completed initial clearing and grubbing of the staging areas, access roads, and reservoir haul roads. Initial silt fence and straw waddles used as best management practices (BMPs) were installed on the downstream swale of the staging area for silt filtration of runoff, prior to runoff leaving the site. During August, BMPs were reviewed and maintenance was performed. Repair was required to the silt fence and straw waddles, due to the cattle drives through the project site. A review of the BMPs was also completed during the months of September and October. No maintenance or repair was needed during this time.

2.2.2 Season Two — 2015

Maintenance was performed on the existing silt fence and straw waddles used as BMPs during June 2015. Additional silt fence was installed around the processed material stockpiles near the man camp area. Maintenance of the silt fence and straw waddles used as BMPs was performed intermittently during July through November 2015. During final demobilization in November, all temporary BMPs were removed.

2.3 DEWATERING

2.3.1 Season One — 2014

No dewatering took place and during season one of construction.

2.3.2 Season Two — 2015

During demolition of the existing stilling basin, at of stream flow through North Clear Creek, seepage entered the old stilling basin through the left stilling basin wall at rate of approximately 1.7 gallons per minute (gpm). MCI proposed and installed 150 feet of 60-inch-diameter CMP pipe in the creek bed as an extension of the existing outlet works pipe, diverting the water around the stilling basin work area. A temporary concrete bulkhead was installed at the headwall of the outlet works pipe. During initial testing of flows through the extension, the temporary pipe shifted causing one seam of the pipe extension to open. MCI evaluated the seepage and determined that the flow rate from the opening in the seam could be controlled with the pumps on hand in the stilling basin work area. These pumps were used to control the flows of the dewatering system for the remainder of season two. Monitoring of dewatering took place during the months of August through October 2015. The temporary 60-inch-diameter CMP bypass pipe was removed, along with the temporary concrete bulkhead, in October.

An 18-inch diameter slotted HDPE sump was installed downstream of the toe drain pipe location for dewatering while installing the toe drain. After installation of the toe drain the 18-inch dewatering sump was left in place and backfilled with filter sand.

2.4 DEMOLITION

2.4.1 Season One — 2014

Partial demolition of the existing spillway side walls was completed during season one, along with demolition of the center portion of the existing spillway slab for the new keyway drain.

2.4.2 Season Two — 2015

The existing stilling basing was demolished during season two.

2.5 SPILLWAY UNDERDRAIN SYSTEM

2.5.1 Season One — 2014

MCI demolished the center portion of the existing spillway slab and trench excavated from Sta. -1+52 to 0+37 for the installation of the new spillway underdrain system. This excavation was observed by the SEO on May 23, 2014 and was considered to be adequate for the construction of the underdrain system. A six-inch-diameter sewer tile with un-cemented joints, which was discovered during demolition of the old approach slab, was removed and capped with grout on the upstream end of the work zone.

Filter sand, drain gravel, and the 8-inch-diameter HDPE pipe were placed in the trench excavation in general accordance with the Project Plans and Specifications. The trench was capped with approximately 32 cubic yards (CY) of backfill concrete, placed on May 31, 2014. Test results of the backfill concrete indicated general conformance with the Specifications.

The remaining section of underdrain, including filer sand, drain gravel, and backfill concrete, for the chute section, approximately 200 linear feet from Sta.0+37 to 2+45 was installed in August.

The newly installed underdrain pipe, from Sta. -1+52 to 0+37, was video inspected in May, and the remaining section of underdrain system installed during season one, from Sta. 0+37 to 1+50, was video in July. The video inspection showed the underdrain system to be clear of any obstructions.

2.5.2 Season Two — 2015

MCI completed installation of the underdrain system, from the chute key at the top of the stilling basin to the drain outfall at approximately Sta. 2+52, and the stilling basing underdrain from Sta. 2+52 to the end sill Sta. 3+45.

MCI completed the video inspection of the underdrain system in July 2015, and no issues were found.

Quality control testing of earthwork materials was performed by Western Technologies, Inc. on the sand and gravel for the underdrain system during season two.

2.6 ANCHORS AND MICROPILES

2.6.1 Season One — 2014

Foundation Anchors

MCI's subcontractor Rock Solid Solutions performed drilling operations for the vertical anchors in the approach slab and chute areas in season 1, from approximately Sta. -1+80.75 to 2+45. Forty-five (45) foundation anchors were installed in the upper spillway slab during the first week of June. Ten of the anchors were load tested on June 8 and an additional seven anchors were tested in July; all tested anchors met the specified acceptance criteria. Refer to Section 3.3 and Appendix C for a summary and discussion of foundation anchor test results.

Wall Anchors

Rock Solid Solutions drilled and installed the anchors on the left and right side chute walls and for the spillway control section in June. Twenty-five (25) wall anchors were installed on the right side and six (6) were installed on the left side wall, to Sta. 0+44. The wall anchor installation was completed season one. Three (3) verification tests and 19 proof tests (tested anchors were selected by the RPR) were conducted on the wall anchors in June and July. All tested anchors met the specified acceptance criteria. Refer to Section 3.4 and Appendix C for a summary and discussion of wall anchor test results.

Micropile

Rock Solid Solutions installed the micropiles above the stilling basin, between approximately Sta. 2+45 and 3+15, in July and tested the micropiles in August. One (1) verification test and two

proof tests were conducted on the micropiles on August 1. Refer to Section 3.5 and Appendix C for a summary and discussion of micropile test results.

2.6.2 Season Two — 2015

Foundation Anchors

MCI's subcontractor Rock Solid Solutions completed installation of the stilling basin floor anchors during in July. Twenty-four (24) anchors were installed to a depth of at least 10 feet embedment into rock. The anchors were grouted with Type III Portland cement. Pull tests on three foundation anchors were performed in August, all anchors passes pull tests. Refer to Section 3.3 and Appendix C for a summary and discussion of foundation anchor test results.

2.7 NEW SPILLWAY

2.7.1 Season One — 2014

MCI completed concrete placements of the left and right side channel spillway walls from Sta. -1+63.75 to -0+58.25 (placements of WL#3, WR#3, WL#7, WL#4, WR#6, WR#4, WL#6, WR#7, WR#5, WL#2, WL#5, and WR#2 per concrete the placement plan) in June.

Concrete placements of the side inlet channel, spillway walls and slabs from Sta. -1+63.75 to -0+58.25 were completed in July; placements IWL#8, IWR#8, IWL#1, IWR#1, IF#6, IF#8, IF#1, IF#3, IF#5, IF#7, IF#9, IF#2, IF#4, IWL#9, IWR#9, IWL#10, and IWR#10 per the concrete placement plan. Also in July, backfill concrete was placed over the spillway drain between approximately Sta. 0+37 and 2+45.

Concrete placements BF-1, BF-2, BWL-1, BWL-2, BWL-3, BWR-1, BWR-2, BWR-3, CF-1, CF-11, CWL-1, and CWR-1, per the concrete placement plan, were placed in August.

In September, MCI completed concrete placements for the spillway chute walls and slab between approximately Sta. 0+57 and 2+45; placements CF-2, CF-3, CF-4, CF-5, CF-6, CF-7, CF-8, CF-9, CF-10, BWR-4, CWR-3, CWR-5, CWR-6, CWR-9, CWR-11, BWL-4, CWL-3, CWL-5, CWL-6, CWL-9, and CWL-11 per the concrete placement plan.

A minimum of 72 hours between adjoining placements was maintained for all placements per the Specifications. The concrete was supplied by Southwest Ready Mix' mobile batch plant staged at the Santa Maria Canal site (approximately 9 miles away). The concrete was placed using an on-site line pump. The wall concrete was generally placed from the bottom up, vibrated as it was placed, and sloughing material was screeded upward. The reinforcement spacing, cover requirements, and dimensions were checked by the URS RPR prior to placements.

Western Technologies, Inc. was on site throughout the month during concrete placements to perform concrete QC testing; plastic concrete testing and cast test cylinders. Refer to subsection 3.1 for a discussion of concrete testing.

2.7.2 Season Two — 2015

Note that the wall anchors were completed in season one (2014). The micropile wall was completed to the end of the stilling basin in season one and MCI decided to stabilize the excavation slope by other means for the work downstream of the existing stilling basin; therefore, the micropile wall was completed in season one.

In June, MCI completed excavation of the stilling basin area down to bedrock and cleaned the bedrock by hand and with compressed air. An inspection of the bedrock in the stilling basin was performed by Jeremy Franz (SEO) and Dale Baures (URS), and placement of concrete against the bedrock was approved.

During July 2015, MCI completed structural concrete placements for the stilling basin walls and slabs between approximately Sta. 2+45 and 3+48. Structural concrete placements of SBF-1, SBF-2, SBF-3, SBF-4, SBF-5, SBF-6, SBF-7, SBF-8, SBWL-1, SBWL-2, SBWL-3, SBWL-4, SBWL-6, SBWR-1, SBWR-2, SBWR-3, SBWR-4, and SBWR-6, were completed in August.

A minimum of 72 hours between adjoining placements was maintained for all placements per the Specifications. The concrete was supplied by Center Redi-Mix or Center, CO. The concrete was placed using an on-site line pump. The wall concrete was generally placed from the bottom up, vibrated as it was placed, and sloughing material was screeded upward. The reinforcement spacing, cover requirements, and dimensions were checked by the URS RPR prior to placements.

MCI's independent material testing firm Mountain Engineering and Testing was on site during concrete placements to perform plastic concrete testing and cast test cylinders. See subsection 3.1 for a discussion of concrete testing.

2.8 DAM FACE MODIFICATIONS

2.8.1 Season Two — 2015

MCI's subcontractor ACA Products (ACA) placed filter sand, drain gravel, and common fill in the toe drain trench and on the dam face, between El. 10,252 and 10,290 feet during September; filter sand, drain gravel, and common fill were placed to the elevations listed below for each week in September.

- First week: El. 10,252 feet
- Second week: El. 10,259 feet
- Third week: El. 10,263 feet
- Fourth week: El. 10,275 feet
- Fifth week: El. 10,290 feet

ACA used one Komatsu PC390LC excavator, one smaller Komatsu PC210 excavator, two Volvo A30D articulation trucks, and one Ingersoll Rand steel drum roller to place the filter sand, drain gravel, and common fill. In areas of tighter turnabout clearance near the left groin area, the smaller excavator was used. A walk behind plate compactor was used for compaction within three feet of the spillway walls.

The contractor scarified and wetted the lift daily from the previous day's placement prior to beginning the current day's placement. Mountain Engineering and Testing, was on site during earthwork operations to perform gradation and compaction tests. See Subsection 3.2 for a discussion of earthwork testing.

2.9 TOE DRAIN INSTALLATION

2.9.1 Season Two — 2015

The excavation of the toe drain trench was started on July 30, 2015 and completed on July 31, 2015. Weathered bedrock was encountered at both the left and right sides of the outlet works pipe, and gravel and cobbles were encountered above the outlet conduit and an approximately 20 by 20-foot area was over excavated to remove some of the larger particles.

The toe drain trench depth was increased near the left groin to locate the source of water infiltrating the trench excavation, and to provide a cutoff for potential foundation piping. The 4-inch-diamter riveted steel pipe and 6-inch-diameter vitrified clay pipe were located in the approximate area shown on the 1928 as-built drawings. The dam slope was over excavated to remove some boulders in the vicinity of the riveted steel pipe.

The toe drain with cleanout was installed in August and September. The toe drain extension upstream of the manhole was temporarily plugged off using a plywood sheet, and common fill was placed around it. This was uncovered after installation of the manhole later in the construction season.

The metering manhole was installed in September. The manhole concrete foundation was placed on September 18, followed by grouting to secure the measuring weir inside of the manhole. MCI also completed the 18-inch-diameter solid pipe out of the manhole to drain into North Clear Creek next to the outlet works headwall, and constructed a riprap grouted swale out of the pipe in September.

2.10 INSTRUMENTATION

2.10.1 Season Two — 2015

During October, MCI's subcontractors Colorado Engineering and Instrumentation and Cascade Drilling L.P. completed piezometer installation PZ-A3 and PZ-A4. These are nested piezometers installed near Sta. 1+10 on the bench at El. 10,265 feet. The drill hole location was moved slightly to the left (west) to avoid the possibility of drilling into the outlet works tunnel. Due to the relatively close spacing of the existing instruments, which were sounded, it was recommend to the Owner and the SEO not to install piezometers PZ-A1 and PZ-A2, located near the crest. Agreement was formalized in Change Order number 2.

Four new structural survey points and four new movement monuments were installed.

2.11 DEMOBILIZATION

2.11.1 Season One — 2014

Season one demobilization was completed by the Thanksgiving in late November.

2.11.2 Season Two — 2015

Season two demobilization activities began in October and were completed by the November 19.

This section provides a summary of the QC testing performed for the Project.

3.1 CONCRETE

3.1.1 Season One — 2014

Backfill concrete for the spillway underdrain cap and structural concrete for the spillway chute was placed during season one.

QC testing personnel from Western Technologies Inc. were on site for the concrete placements, and tested slump, air, and temperature of the plastic concrete. Typically, an initial test (slump, air, and temperature) was performed on the concrete truck upon arrival, prior to placement of any concrete. After discharging approximately one-third (⅓) of the load, a second test was performed and test cylinders were cast. Five cylinders were made for each concrete placement; one for 7-day breaks, two for 28-day breaks, and one hold cylinder.

All tests performed were in general conformance with the Specifications. Results of the initial tests on the concrete ranged from 4.2 to 7.4 percent air content and 66 to 76°F temperature. Results of the second set of tests were within the specified criteria, with air tests ranging from 4.0 to 8.0 percent and slump tests ranging from 2¼ to 6¼ inches. All concrete placed was within the specified 90 minute time limit, and specified revolution count of 250 from batch to placement.

28-day breaks of structural concrete ranged from to 2,830 to 5,700 psi. Of the breaks that did not meet the required minimum strength of 4,000 psi, 56-, 71-, 72-, 84-, 85-, or 112- -day strengths indicated that the minimum strength had been me, with the exception of concrete placed on July 21, July 23, and August 1. The placements on July 21 and July 23 (IWL-9 and IWR-9) were located at the left and right spillway walls between Sta. -0+38.25 and -0+9.00, and the August 1 placement (BF-2) was located in the slab under the access bridge. All these placements required coring, with the cores indicating that the required minimum strength had been met.

A concrete test summary and QC test reports are included in Appendix B.

3.1.2 Season Two — 2015

Structural concrete for the spillway chute and stilling basin was placed during season two.

QC testing personnel from Mountain Engineering and Testing were on site for the concrete placements, and tested slump, air, and temperature of the plastic concrete. Typically, an initial test (slump, air, and temperature) was performed on the concrete truck upon arrival, prior to placement of any concrete. After discharging approximately one-third (⅓) of the load, a second test was performed and test cylinders were cast. Five cylinders were made for each concrete placement; one for 7-day breaks, two for 28-day breaks, and one hold cylinder.

All tests performed were in general conformance with the Specifications, with air tests ranging from 3.8 to 5.8 percent and slump tests ranging from 1½ to 5 inches. All concrete placed was within the specified 90 minute time limit, and specified revolution count of 250 from batch to placement.

28-day breaks of structural concrete ranged from to 4,590 to 5,920 psi; all 28-day strength met the minimum required strength.

A concrete test summary and QC test reports are included in Appendix B.

3.2 EARTHWORK

3.2.1 Season One — 2014

Moisture tests and gradations were performed on the filter sand and drain gravel stockpiled on site prior to placement of the material, and on the in-place material. Quality control testing of earthwork materials was performed by Western Technologies, Inc. on the sand and gravel for the underdrain system during the current reporting period.

All moisture field tests and gradations were in general conformance with the Specification requirements.

3.2.2 Season Two — 2015

ACA, under subcontract with MCI, processed common fill, filter sand, and drain gravel. Revised filter sand and drain gravel gradations from a Colorado Department of Transportation (CDOT) nearby quarry were approved by the SEO early September 2015. The modified gradations did not alter the functionality of the materials and met the original design intent. The approved modified filter sand required additional Atterberg limit and permeability testing, which were performed and reviewed with the SEO and found acceptable.

Common fill was obtained from two on site sources. The first common fill source came from the processed spoils pile in the man camp area. Material from this spoils pile originated from the downstream dam face during initial clearing, grubbing, and grading. The second common fill source originated from the borrow pit located on the right side of the spillway approach slab. A total of three proctors were performed on samples collected at various locations to evaluate the material prior to placement. These three proctors resulted in optimum moisture content for compaction of (P2) 13.3, (P3) 11.4 and (P4) 9.6 percent and maximum dry densities of 119.3, 122.6, and 124.4 pcf.

Approximately 13,100 cubic yards of common fill, was placed on the dam face during the month of September. Mountain Engineering and Testing performed field and laboratory testing for all earthwork materials placed during season two. All field tests of the common fill were in general conformance with the Specification requirements except for as listed below.

Twenty seven (27) density moisture tests were obtained from the placed common fill material processed from the spoils pile in the man camp and pit area. Fourteen nuclear density tests performed at depths down to 4-inches, showed moisture readings below the Specification however, all tests met the density specification. It was attributed that the high winds and heat were removing the moisture from the placed material to a depth that did not exceed approximately two (2)-inches. Further, nuclear density tests at depths down to eight (8)-inches, showed an increase in moisture content in this depth. A water truck with a spray bar was placed at the stockpile to add moisture to the common fill. However, over the course of next few days the low moisture readings continued to be measured. Higher temperatures and high winds, were considered to be the reason for the lower readings. It was determined at this time, to move the water truck with spray a bar from the stockpile to the work area, on the dam face. The area from 25 feet off the spillway way, to 75 feet from the left groin approximately between elevations 10,264 and 10,728 were reworked and reconditioned. This was accomplished by removing the

material in a windrow fashion overturning the material and using the water bar on the water truck. Additionally, a hose was to wet down the material to replace and re-compact. Nuclear density tests at seven (7) additional locations, showed moisture content within Specifications.

One gradation test result on common fill material dated September 11, 2015 had 3.2 percent passing the No. 200 sieve, above the maximum specified fines content. This sample was taken from placed material at El. 10,264 feet and was obtained from the borrow pit on September 11, 2015. A gradation test performed on September 17, 2015 on the in place material at El. 10,269 feet obtained from the borrow pit of September 11, 2015 showed test result within the specification requirements. Hence, the first sample being so close and followed up by second test within specification limits, resulted in approval of the placed common fill material.

The proctor densities for the filter sand, placed in the toe trench excavation below the drain gravel and toe drain were near the max proctor density, which is greater than recommended. However, the intent of this material is to prevent foundation soil particle movement and not permeability and it was approved.

See Appendix B for a summary of earthwork test results.

3.3 FOUNDATION ANCHORS

Specifications require a design mix with a minimum of 4,000 psi compressive strength at 7-day, for the foundation anchors. No testing is required for the foundation anchors, but in an effort to document the material strengths of the grout used during construction, Rock Solid Solutions cast three two (2)-inch cubes each day that foundation anchors were grouted in place. Strength data for the foundation anchor grout samples ranged from 1,140 psi at seven (7)-days, 2,270 psi at twenty one (21)-days to 6,850 psi at twelve (12)-days.

3.3.1 Season One — 2014

MCI's subcontractor Rock Solid Solutions performed drilling operations for the vertical anchors in the approach slab and chute areas in season 1, from approximately Sta. -1+80.75 to 2+45. The anchors were grouted with Type III Portland cement. Seventeen (17) foundation anchors were tested during season one; all met the specified acceptance criteria. Rock Solid Solutions'' construction reports are included on Appendix C.

3.3.2 Season Two — 2015

MCI's subcontractor Rock Solid Solutions completed installation of the stilling basin floor anchors during in July. Twenty-four (24) anchors were installed to a depth of at least 10 feet embedment into rock. The anchors were grouted with Type III Portland cement. Pull tests on three floor anchors were performed in August, all anchors passes pull tests. Rock Solid Solutions'' construction reports are included on Appendix C.

3.4 WALL ANCHORS

3.4.1 Season One — 2014

Rock Solid Solutions drilled and installed the anchors on the left and right side chute walls and for the spillway control section in June. Twenty-five (25) wall anchors were installed on the right

side and six (6) were installed on the left side wall, to Sta. 0+44. The wall anchors were completed season one.

The Specifications required that three grout samples be taken each day grout is placed during construction of the temporary wall anchors. In accordance with the specifications, Rock Solid Solutions, cast three 2-inch cubes each day that temporary wall anchors were grouted in place, to evaluate the compressive strength of the grout used during construction. Specifications require a minimum twenty eight (28)-day compressive strength of 5,000 psi, for grout used for temporary wall anchors. Initial test data indicated an average compressive strength of 3,155 psi, between fourteen (14) days and sixteen (16) days with a single break coming in at 2,770 psi. at eight (8) days. See Appendix B for grout compressive strength information and Appendix C for Rock Solid Solutions' Construction Reports.

3.5 MICROPILES

3.5.1 Season One — 2014

Rock Solid Solutions installed the micro piles above the stilling basin, between approximately Sta. 2+45 and 3+15, in July and tested the micropiles in August.

The specifications required that three grout samples be taken each day grout is placed during construction of the micropiles. In accordance with the specifications, Rock Solid Solutions cast three two (2)-inch cubes each day that micropiles were grouted in place, to evaluate the compressive strength of the grout used during construction. Specifications require a minimum 28-day compressive strength of 4,000 psi, for grout used for micropiles. One grout break at 28-days returned was 5,050 psi.

See Appendix B for detailed grout compressive strength information for June and Appendix C for Rock Solid Solutions' Construction Reports.

4.1 CONSTRUCTION PROBLEMS AND RESOLUTIONS

This section summarizes problems encountered during construction, and the implemented solutions to those problems.

4.1.1 Season One — 2014

Problem 1: Demolition of the center portion of the spillway slab and placement of the drain pipe was performed prior to installing the wall anchors.

Resolution 1: MCI installed bracing across the spillway channel to stabilize the walls until the wall anchors were installed (see Photo 8 in Appendix A). The wall anchors were installed and tested June 2014, and the bracing described in the May 2014 report was removed following the anchor installation.

Problem 2: Southwest Ready Mix was not able to clearly demonstrate the ability to test the moisture content of the fine and coarse aggregate stockpiles; therefore, concerns arose as to accurate water:cement ratio in the batched concrete.

Resolution 2: URS engineers performed on-site observations at the batch plant to work through the issues involved with sampling the free moisture in the aggregates, modifying each concrete batch to account for aggregate moisture, and calculating the batched water:cement ratio for each load.

Problem 3: The vertical and wall anchor grout testing indicated that the 28-day strength was below the 5,000 psi requirement. None of the grout break data for the anchors obtained during June indicated that a minimum 7-day compressive strength of 4,000 psi had been met.

Resolution 3: The wall anchors were designed according to Federal Highway Administration (FHWA) guidelines that assume 3,000 psi grout strength. Therefore, while the test data indicated potentially low 28-day breaks, the minimum 3,000 psi grout strength at 28 days was achieved. In addition, all verification and proof tests conducted on the temporary wall anchors during July 2014 met the criteria for creep and were accepted. Given the test results for the wall anchors, the design assumptions, and the temporary nature of the wall anchors, the grout strength data indicated the anchors have met the intent of the original design.

The foundation anchors were designed to resist a maximum vertical load of 30 kips. All pull tests conducted on the foundation anchors in July 2014 satisfied the design requirements and were accepted. Given that all pull tests were conducted within 72 hours of grouting of the foundation anchors and all anchors pull tested met the acceptance criteria, the design intent of the foundation anchors was satisfied.

Based on the above discussions, the design intent was met for both the foundation anchors and the temporary wall anchors.

4.1.2 Season Two — 2015

Problem 1: Water was seeping into the stilling basin excavation through the left wall of the old stilling basin at approximately 1.7 gallons per minute. This caused flooding of the stilling basin work area and prevented MCI from performing required work for the stilling basin.

Resolution 1: MCI initially used two, 2-inch pumps and one, 4-inch pump to dewater the stilling basin area but this approach could not keep up with inflows. MCI installed 200 feet of CMP pipe through the creek bed, as an extension to the existing outlet pipe, diverting the water around the stilling basin work area.

Problem 2: Wet areas were noted on the upper and lower downstream slope during topsoil and riprap removal. The wet areas became more apparent after the surface was tracked on June 29, 2015. The elevations of the seepage areas were approximately:

- Lower seepage areas between El. 10,211 and 10,215 feet
- Upper seepage areas between El. 10,225 and 10,228 feet

Resolution 2: The wet areas were monitored and found to become less wet over time. No action was deemed necessary or taken.

Problem 3: Gradation issues of the processed filter sand and drain gravel material in the CDOT pit, where the material did not meet the requirements of the Specification, resulted in delays in starting the toe excavation and placing the filter sand, drain gravel, and common fill for the new drain and buttress.

Resolution 3: A design change was developed to allow for the use of the processed material from the CDOT pit. Several test pits were excavated to gain a better understanding of what would be required for the toe drain excavation, to minimize the potential for delays while the toe excavation was open. A summary of the test pits follows:

- Three test pits were excavated on July 11, 2015 near the downstream dam toe to the bottom of the toe drain trench. The first test pit near the spillway encountered foundation alluvium with cobbles and boulders at approximately El. 10,208 feet. Water was flowing into the test pit at approximately 1 gpm. The second test pit was excavated near the middle of the dam and encountered a 6-inch vitrified clay pipe on the upstream side of the test pit at approximately El. 10,200 feet. No water was flowing from the vitrified pipe, but water was flowing into the test pit at approximately 30 gpm but dissipated and eventually stopped. The foundation material consisting of alluvium with cobbles and boulders, and weathered bedrock was observed below the vitrified pipe. The third test pit was excavated near the left groin and encountered boulders and cobbles. Water was flowing into the test pit at approximately 4 to 5 gpm and remained constant.
- Two additional test pits were excavated on July 20, 2015 left and right of the approximately 54-foot-long outlet conduit extension constructed in 1960. The extension consists of a 72-inch-diameter CMP. The CMP was not exposed so that its integrity would not be compromised. A battered concrete wall was found on the right side of the CMP.

Based on the test pits, URS estimated that a significant change in conditions was unlikely, and that the required dewatering effort could be handled by the equipment on hand. The specified filter sand gradation was adjusted to accommodate the process materials from the CDOT pit; see *Design Changes 2-4* below.

Problem 4: During excavation of the toe drain, several conditions were encountered that required minor modifications to the design. These conditions are as follows:

1. Gravels and cobbles were noted along the upstream excavated slope above the outlet conduit.
2. Alluvium and larger boulders were located in the excavated slopes near the left groin, and water was noted to be flowing into the excavation at rates comparable to those found in the left groin test pit described above.

Resolution 4: The following measures were taken to address the unanticipated conditions:

1. An approximately 20- by 20-foot area was over excavated to remove some of the larger particles. Filter sand was placed in the over excavated area to act as a filter diaphragm around the outlet conduit.
2. The toe drain trench depth was increased near the left groin, to locate the source of water coming into the trench, and to provide a cutoff for potential foundation piping. The 4-inch riveted steel pipe had flowing water, which was found to be the major source inflow into the excavation. The 6-inch vitrified clay pipe was dry. Water was also noted flowing from the foundation into the trench approximately 20 feet left of the steel pipe. All flowing water was clear. The dam slope was over excavated to remove some boulders. However, 1928 design drawings note that the boulders could extend 100 feet upstream of the original dam toe. The boulders were noted to be embedded in fine particle matrix where the excavation was terminated.

The minor modifications to the design were documented during construction and were included in the as-built drawings; see *Design Change 5* below.

4.2 PROJECT DESIGN CHANGES AND POTENTIAL CHANGES

4.2.1 Season One — 2014

Design Change 1: The drawings and design calculations were updated to correct elevations, spillway width through the control section, and reinforcement in the transition from the sloping inlet structure walls to the vertical control section walls on the original design drawings. A design change memorandum and updated design drawings were submitted to the SEO in June.

Explanation/Justification 1: MCI performed an initial survey of the site that was in conflict with the information shown on the as-built drawings. URS checked the survey data used to generate the design drawings and compared it with the data provided by MCI. URS agreed and a correction was necessary to correctly show elevations on portions of the drawings and also the spillway control section width. URS also noted a conflict in the constructability of the walls in the transition section between the sloping walls in the inlet structure and the vertical walls in the control section.

4.2.2 Season Two — 2015

Design Change 1: The existing left groin drain was found to be 2 to 4 feet higher than the proposed subgrade on the drawings. To excavate down to the depth of the subgrade, MCI proposed removing the left groin drain. URS reviewed this request and approved the removal of the existing left groin drain.

Explanation/Justification 1: The left groin drain was found to be dry and it was not required for the modifications to the dam face. It was acceptable to remove the groin drain and MCI provided the elevations of the drain line that was removed for as-built purposes.

Design Change 2: ACA had been processing filter sand for the toe drain, and the percent passing the No. 200 sieve (fines) was higher than the specified maximum. URS submitted a letter to the SEO to modify the Specification for the filter sand to increase the fines that can pass the No. 200 sieve with some additional testing required for the in-place material.

Explanation/Justification 2: URS reviewed and analyzed the gradation information and had a permeability test run on the filter sand with the higher fines content. The analysis showed the filter sand with the higher fines content still had adequate permeability, and was appropriate for the toe drain. In accordance with the letter to the SEO to modify the Specification for the filter sand, additional permeability testing was performed for the in-place sand.

Design Change 3: A letter was submitted to the SEO to modify the gradations of the filter sand and drain gravel used for the toe drain, and to modify the toe drain to eliminate the three-stage filter along the excavated slopes. The available materials at the CDOT pit had more fines passing the No. 200 sieve for the filter sand and had different gradations for the ⅜-inch and No. 4 sieve for the drain gravel than what is required in the Specifications. The gradations were modified to match what was being produced at the CDOT pit.

Explanation/Justification 3: The letter was approved by the SEO to modify the gradations and toe drain configuration, and additional testing requirements including Atterberg limits and permeability were added to the in-place filter sand to verify the modified gradations. The in-place material would not alter the functionality of the filter sand.

Design Change 4: Based on the gradations of the processed common fill, the Specifications for the common fill were revised to allow up to 20 percent fines. This change was issued as a response to RFI #20.

Explanation/Justification 4: Up to 20 percent fines is consistent with the original design calculations and was deemed acceptable for the purposes of the common fill in the buttress. Additional measures were taken to mitigate potential for fines intrusion into the toe drain (see below).

Design Change 5: A design modification to the top of the toe drain, which involved surrounding the drain gravel with filter sand prior to placing the common fill, was made and is reflected on the as-built construction drawings. Filter sand was also included on the left and right sidewalls of the toe drain trench along the left groin.

Explanation/Justification 5: The filter sand over the top of the gravel section in the toe drain was added to provide protection against clogging of the drain by fines washing into the gravel from the common fill in the buttress or through the weathered rock in the abutments.

Design Change 6: The drill hole location for PZ-A3 and PZ-A4 was moved slightly to the left to be further away from the outlet works. After looking at the site and the relatively close spacing of the existing instruments, which were sounded October 8, 2015, it was recommend to the Owner and the SEO not to install PZ-A1 and PZ-A2 located near crest.

Explanation/Justification 6:

This was based on:

- Existing piezometer B-4 serves the purpose for establishing the phreatic surface through the dam along with CE-1, which is approximately 70 feet to the left of the nested piezometer installed on October 8 and 9 2015.
- The existing piezometers are in a good location to evaluate phreatic surface. Based on historic record they appear to respond to reservoir fluctuation.
- The sounding of the existing piezometers shows similar depths to the as-constructed logs.
- With these lower bench piezometers installed October 8 and 9 2015, the dam has sufficient instruments to monitor two study sections (Sta. 1+10 and 2+68).

5.1 CERTIFICATION

In the opinion of the undersigned, the construction activities were accomplished in general accordance with the intent of the design drawings and specifications prepared for this Project, and approved field directives.

Scott L. Jones, PE

Colorado PE 39131

5.2 LIMITATIONS

URS represents that our services were performed within the limits prescribed by the scope of work for the Project in a manner consistent with the level of care and skill requisite with the current standard of professional engineering practice. No other representation to SMRC, expressed or implied, and no warranty or guarantee is included or intended. We do not guarantee the performance of the Project in any respect; only that our engineering work and judgments rendered meet the standard of care of our profession.

Appendix A
Construction Photos

Season One



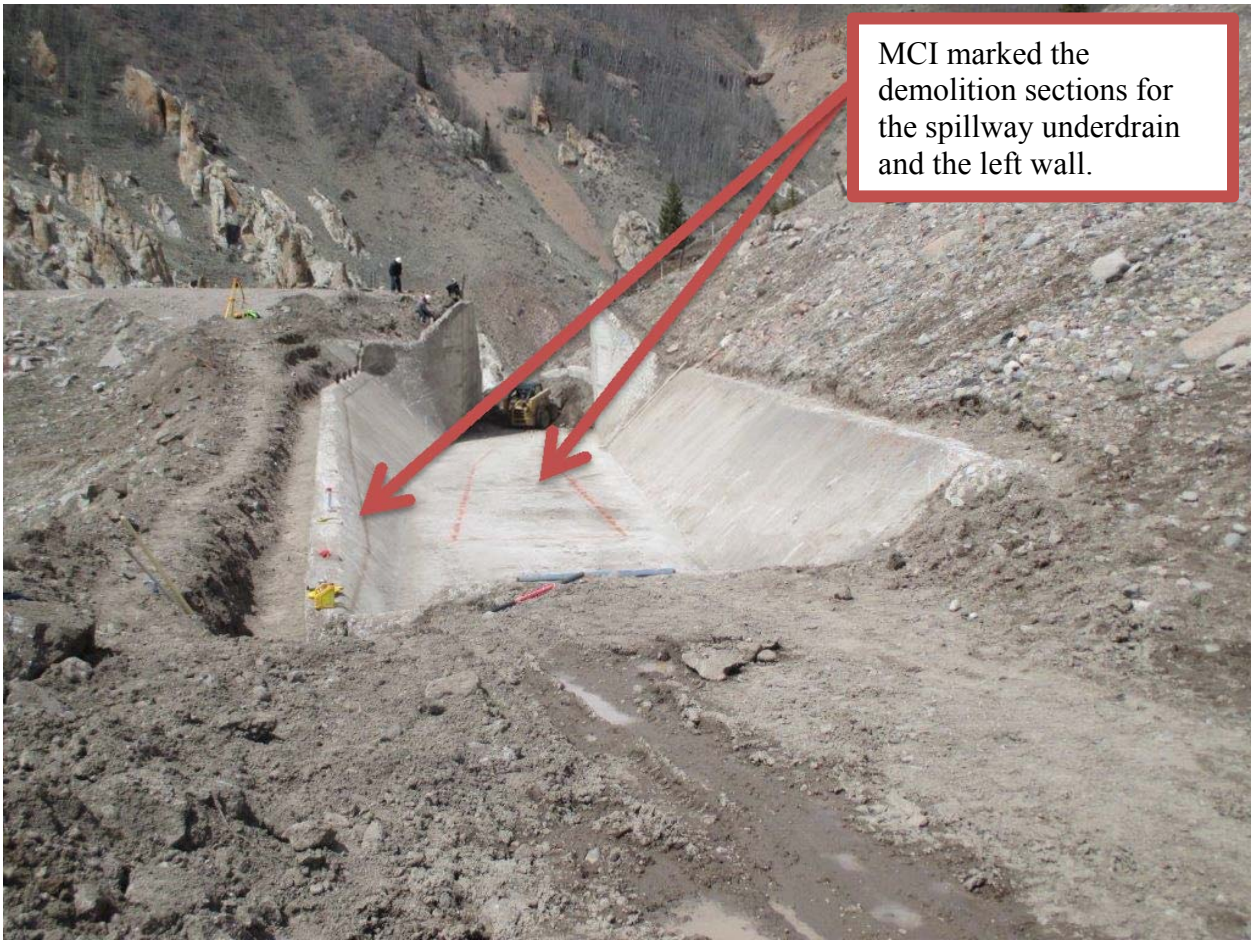
1. Location of survey control point for spillway construction.



2. Benchmark elevation of survey control point for spillway construction.



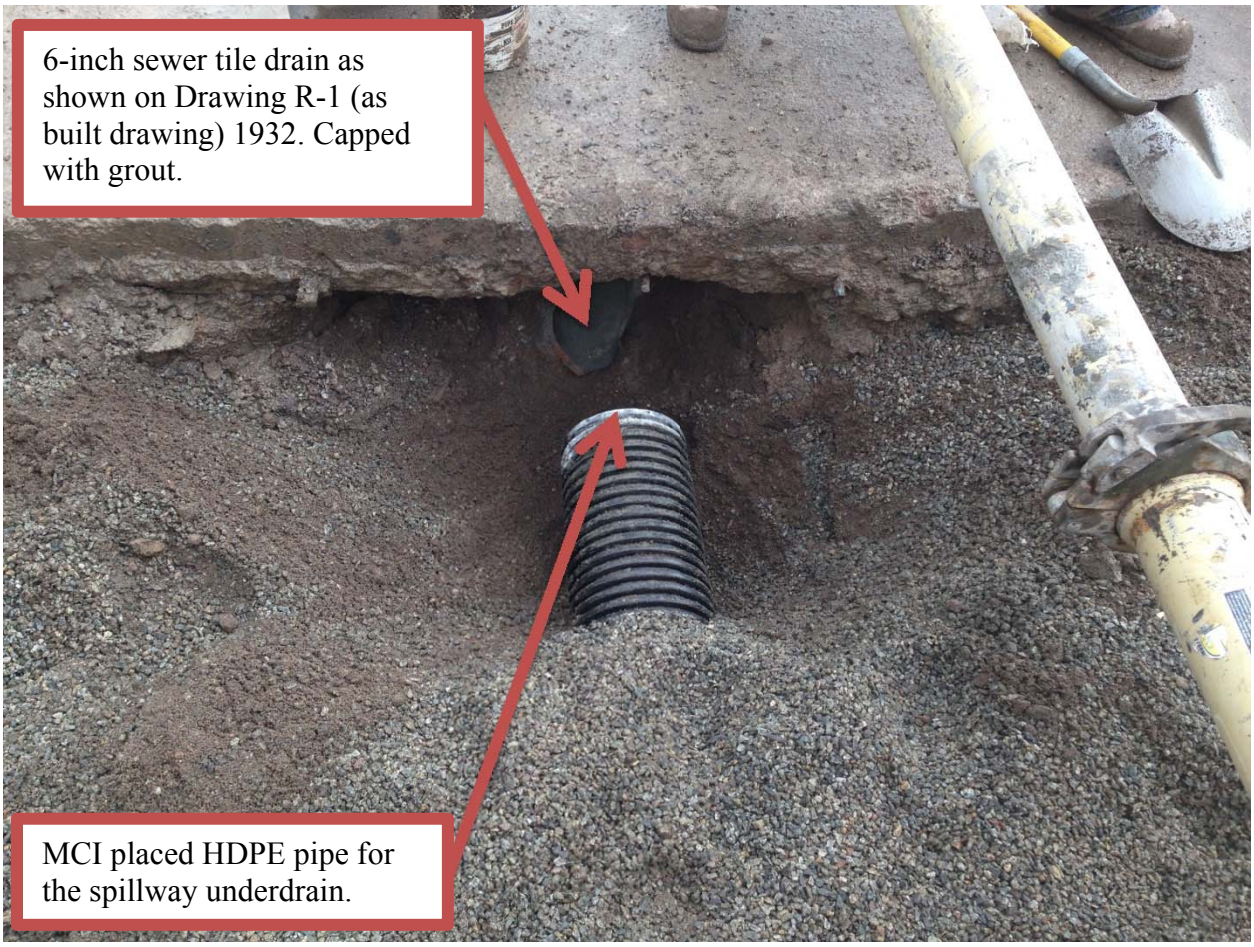
3. Survey control point for spillway construction.



4. Markings showing extent of demolition of the spillway slab for installation of the underdrain and construction of the new spillway crest.



5. Demolition of the spillway slab for installation of the underdrain and construction of the new spillway crest, and partial installation of the underdrain.



6. HDPE drain pipe at the downstream end of the drain installation, approximate Sta. 0+37.



7. Preparations for placement of backfill concrete over the underdrain.



8. Curing of backfill concrete and temporary bracing across the spillway.



9. Spillway inlet after placement and curing of backfill concrete.



10. Crews placing forms and tying rebar for wall placements of approach channel, left side, looking downstream.



11. Drilling subcontractor drilling operations for wall anchors; left side wall, looking downstream.



12. Concrete placed right side approach channel wall, WR6.



13. Cold weather protection left side approach channel wall WL4, looking downstream.



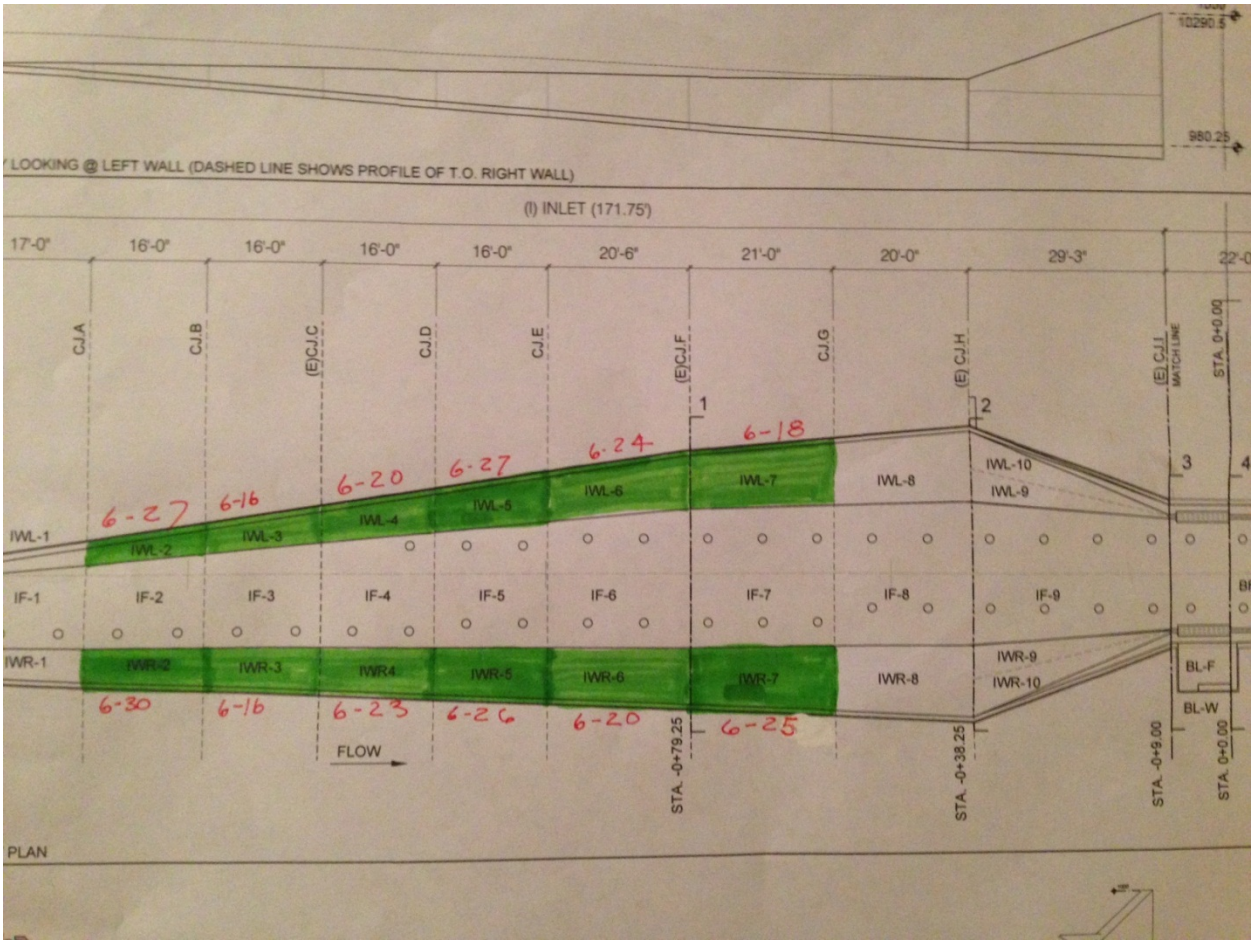
14. Crews placing concrete right side approach channel wall, WR5, looking downstream.



15. Drilling rig installing right side wall anchors, looking downstream.



16. Verification anchor.



17. Concrete placement plan updated for June.



18. Underdrain down spillway slope.



19. Looking upstream at formwork for spillway transition section walls.



20. Looking upstream from stilling basin demolition work.



21. Working on spillway transition section walls.



22. Looking downstream from upstream end of side channel inlet section.



23. Concrete crew working on right spillway transition section wall.



24. Silt fence downed by cattle.



25. Silt fence repaired.



26. Looking upstream at concrete crew placing slab IF--6.



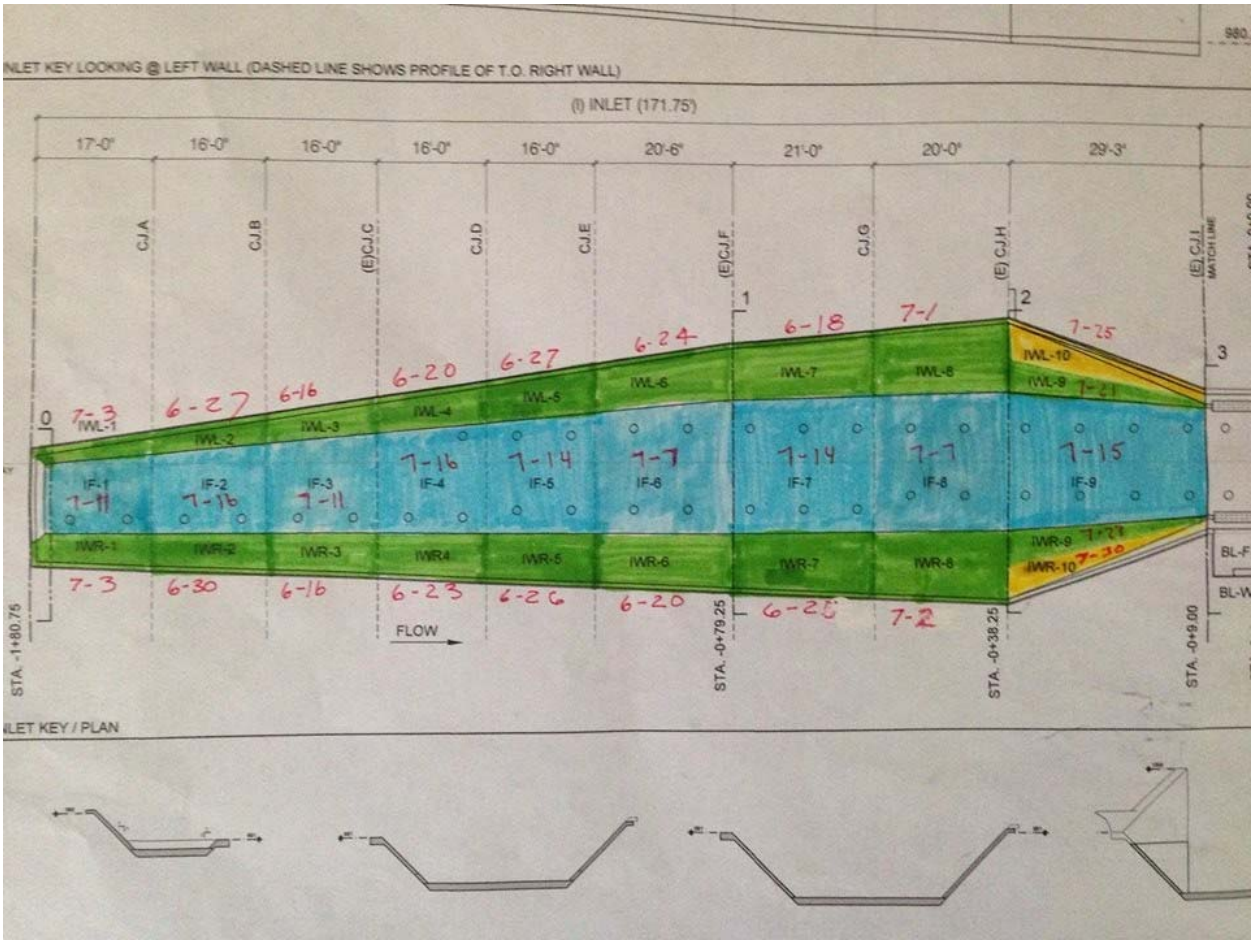
27. Concrete crew finishing slabs IF--8 and IF--6.



28. Micropiles.



29. Concrete crew placing concrete slab IF-1.



30. Concrete placement plan updated for July.



31. Concrete crew placing backfill concrete on the left side of the spillway chute.



32. Completed backfill concrete.



33. Concrete crew placing concrete for slab placement CF-1.



34. Forming and placing rebar for wall placement CWR-1.



35. Concrete crew placing concrete for wall placement BWR-2



36. Completed wall placement CWL-1.



37. Concrete crew finishing slab placement CF-11.



38. Concrete placement plan updated for August.



39. Looking upstream at right spillway chute wall placement CWR-1, prior to cap placement.



40. Rebar and formwork for spillway chute slab placement CF-3.



41. Concrete crews placing and finishing concrete for the spillway chute slab.



42. Concrete crew placing concrete for spillway chute slab placement CF-10.



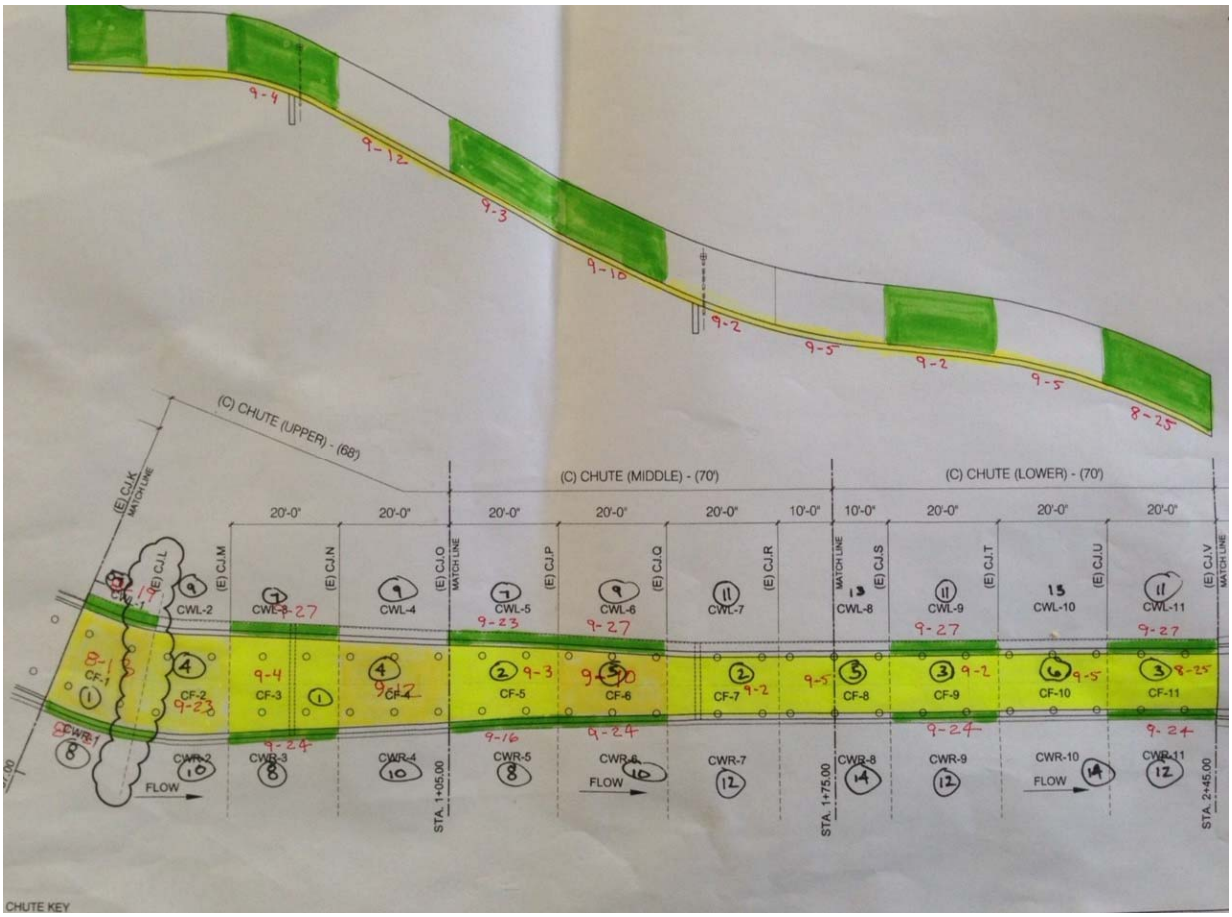
43. Concrete crew placing concrete for spillway chute slab placement CF-4.



44. Concrete crews placing concrete for spillway wall placements BWL-4 and BWR-4.



45. Concrete crew placing concrete for the left side spillway chute walls.



46. Concrete placement plan updated for September.



47. Foot bridge delivered to the site.



48. Fencing delivered to the site.



49. Fencing delivered to the site.



50. Concrete placements for the left side spillway chute walls.



51. Concrete placements for the spillway chute walls.



52. Placement of the dam access foot bridge.



53. Completed spillway chute walls.



54. Reinforcement placement for the micropile wall.



55. Concrete placement plan updated for October.

Season Two



1. CDOT pit processing material.



2. Area of silt fence and hay waddles in stream of man camp; no silt infiltration over winter.



3. Stream crossing with four, 36-inch round pipe 142 gpm.



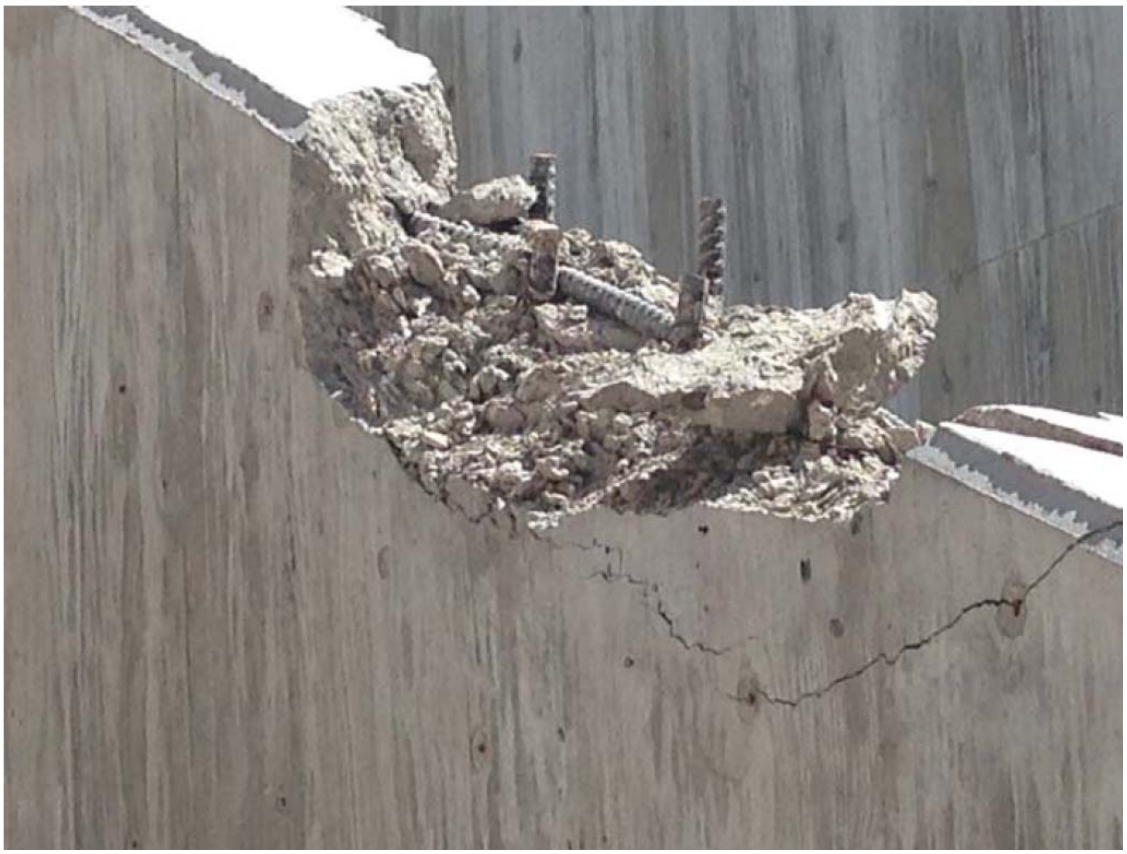
4. Old stilling basin after excavation looking upstream.



5. 224 gpm with new 5-foot squash pipe and 36-inch round pipe.



6. Seepage into stilling basin.



7. Damaged spillway wall from boulder over winter shutdown.



8. View of dam face work removing top soil from left groin area



9. Stock pile of topsoil man camp area.



10. Looking upstream into old stilling basin area.



11. Two (2-inch) hoses and pumps; one (4-inch) hose and pump.



12. Looking upstream at dam face.



13. View of dam face work removing top soil.



14. View looking upstream from the stilling basin area demolition.



15. Looking upstream from old stilling basin area at formwork for chute key.



16. View of drain line connection in chute key located at approximately Sta. 2+47.56.



17. View of dam face work removing top soil near headwall of outlet works pipe



18. View looking upstream from the man bridge to the approach slab preparation for protection of approach slab.



19. Looking upstream at dam face, stilling basin, and spillway.



20. View of exposed foundation in stilling basin.



21. View of stilling basin cleaning work.



22. Crews turned off pumps during drain sand installation and it was determined that the sand was saturated and needed to be removed.



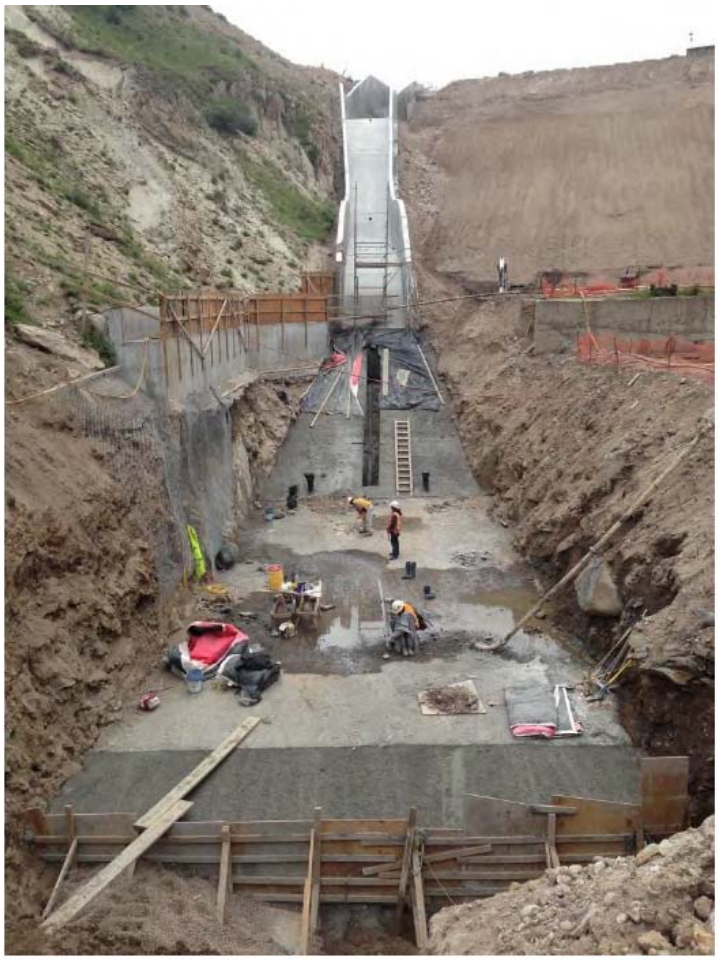
23. Sump with pump in place during drain gravel installation to keep in the dry.



24. View of stilling basin with mud mat place 07/16 and 07/17.



25. View of additional safety measures put in place.



26. View of stilling basin with mud mat place down to end sill at approximately Sta. 3+45.00.



27. Installation of underdrain at end sill.



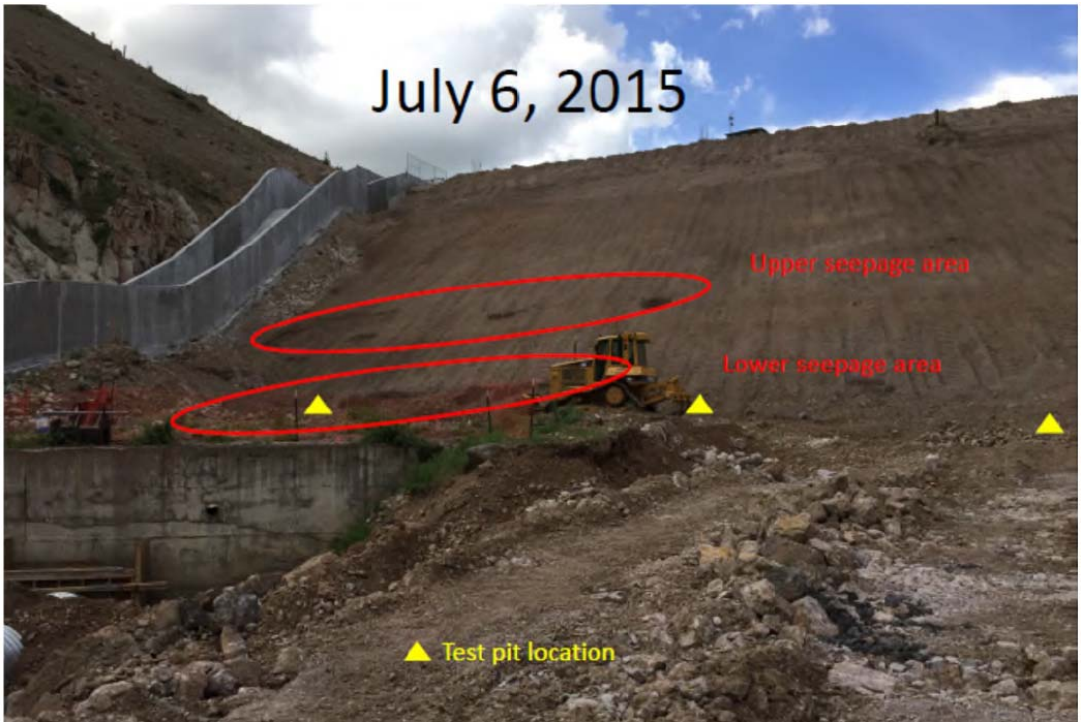
28. Video inspection of underdrain.



29. View looking upstream from the end sill location.



30. View of stilling basin with crews working installing vertical bars for the walls.



31. Wet areas noted on the downstream dam slope and test pit locations at downstream toe.



32. Test pit near spillway. Red arrow in photo to the left show the original outlet terminal structure. Green arrow in the photo to the right shows approximate alluvium foundation contact. Note cobbles and boulders in test pit.



33. Approximately 1 gpm of clear water seeping into test pit on left side at bottom of test pit near bottom elevation of outlet works pipe (within alluvium foundation). Photo of left side looking left.



34. Test pit located at middle section, looking upstream. Water flowing at location marked by red arrow. Green arrow shows location of vitrified pipe drain.



35. Test pit excavated near right groin, looking upstream. Water flowing at location marked by red arrow.



36. Test pit excavated near the right side of the original terminal structure for the outlet conduit. Water less than 1 gpm at location marked by red arrow was noted on the upstream side of the test pit.



37. Test pit excavated near left side of the original terminal structure. Water flowing at location marked by red arrow.



38. Test pit excavation left of the original terminal structure.



39. Test pit excavated on left side of the original terminal structure.



40. Enlarged excavation at encountered boulder area, looking upstream. Yellow arrow shows location of 6-inch vitrified clay pipe and red arrow shows location of 4-inch riveted steel pipe.

 Six

41. Six-inch vitrified clay pipe exposed in toe drain trench, looking upstream and left.



Four

42. Four-inch riveted steel pipe found near left groin.



43. Toe drain trench excavation. Note slope over excavated near the outlet works pipe and in area where boulders were noted near left groin.



44. View looking upstream from the end sill location.



45. View of worksite stilling basin walls after form removal.



46. View looking upstream from the end sill location last floor placement.



47. View of worksite stilling basin upper walls after form removal.



48. View looking upstream from the end sill location.



49. View of worksite stilling basin upper walls after form removal.



50. View looking upstream from the end sill location.



51. Drain gravel placed around the toe drain.



52. Filter sand placed on downstream dam slope and left groin.



53. Filter sand placed on top of drain gravel around toe drain.



54. View of worksite at approach slab borrow area processing common fill, from left side dam crest.



55. View of toe drain area with ACA PRODUCTS crews working filter sand, gravel and common fill.



56. Filter sand placed in toe drain trench. Sump pump downstream of 4-inch steel pipe.



57. Toe drain placed with drain gravel surrounding the pipe.



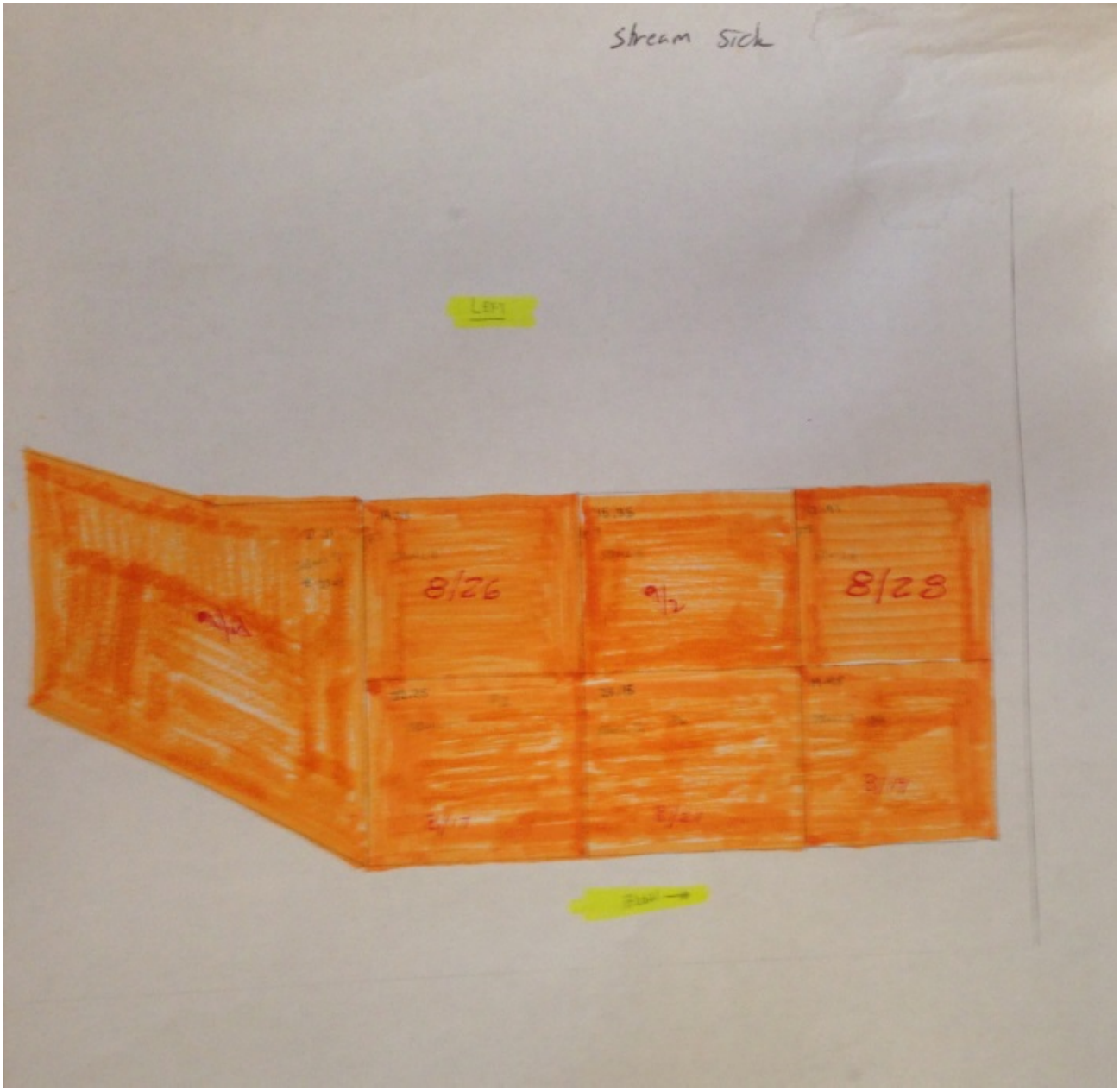
58. View of toe drain area with ACA PRODUCTS crews working filter sand, gravel and common fill.



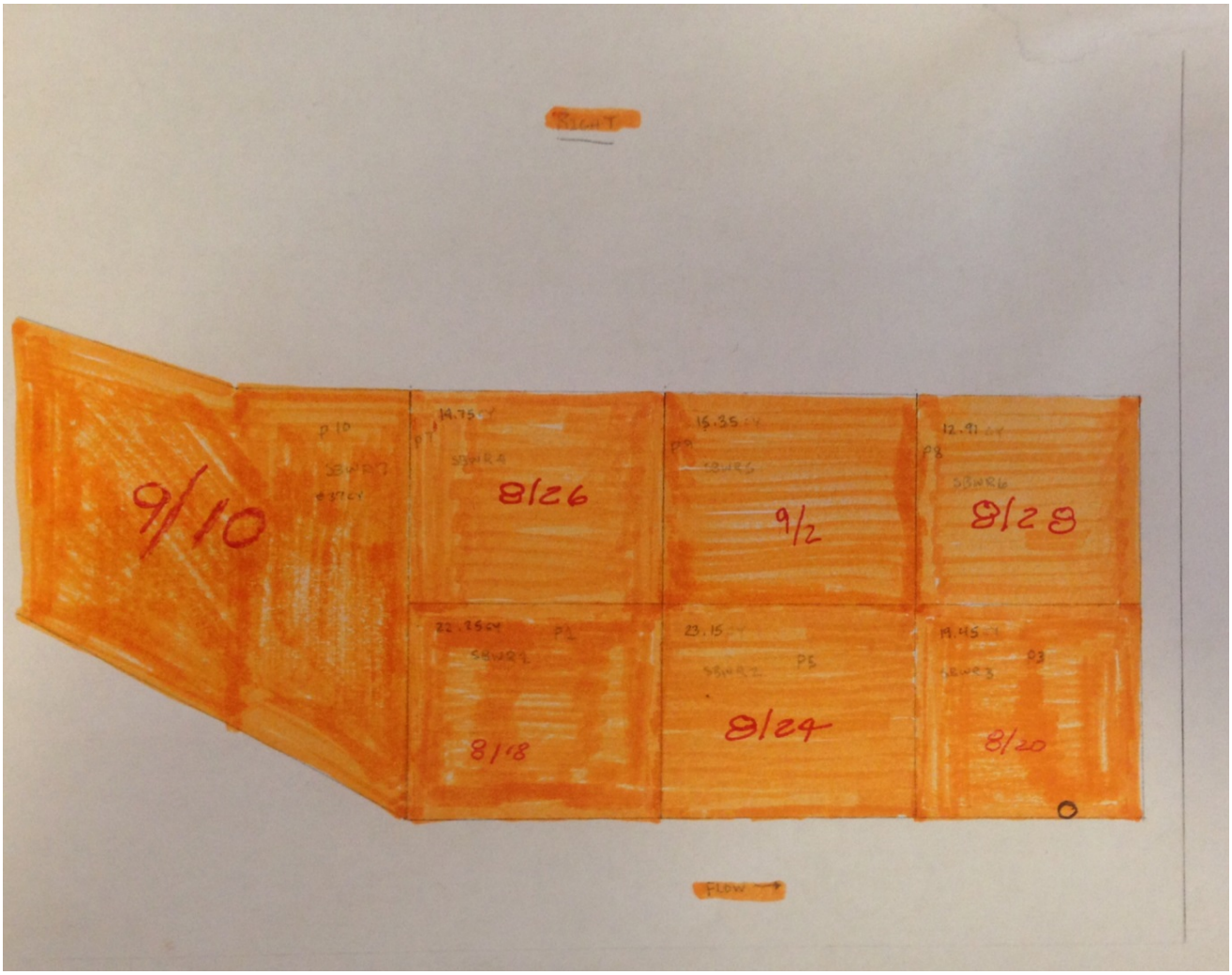
59. View of toe drain area with ACA PRODUCTS crews working filter sand, gravel and common fill.



60. View of dam face with ACA PRODUCTS crews working filter sand, gravel and common fill.



61. Stream side of stilling basin walls placements for month of September.



62. Micro pile side of stilling basin walls placements for month of September.



63. Manhole installation invert elevation 10201.85 feet.



64. Moisture conditioning common fill pile in the pit area.



65. Reconditioning of common fill for moisture content to bring within Specification.



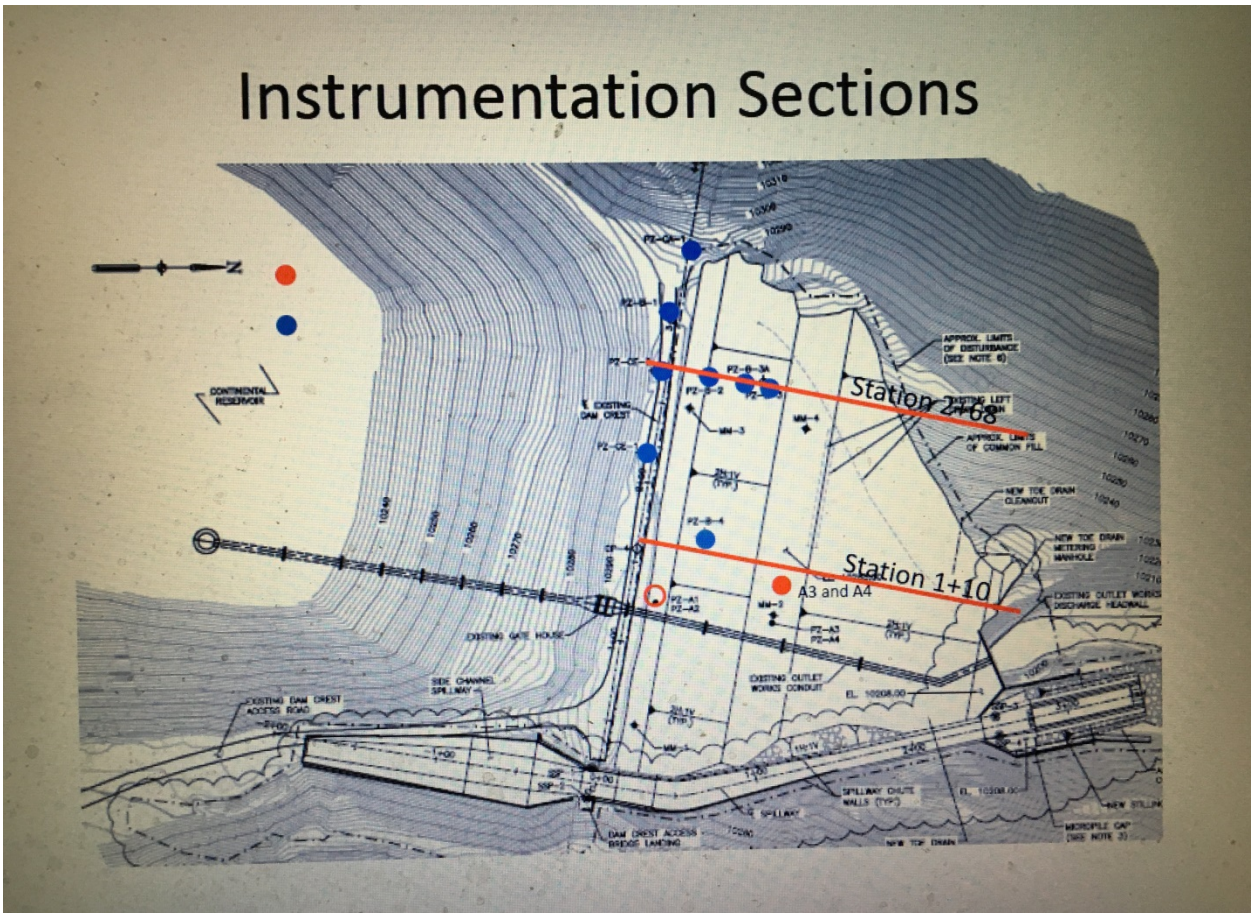
66. View looking upstream from the end sill location to face of dam earthwork completed to elevation 10275.00 feet.



67. Looking downstream from bench at elevation 10265 feet, near riprap.



68. Drilling operations for piezometers.



69. Instrumentation locations.



70. Continental team day of final walkthrough.



71. Looking upstream from the stilling basin riprap after the seeding operation was completed.



72. Looking down to the man camp area from the dam road.



73. Application of the Sikagard 705 L concrete sealer.



74. Application locations of the Sikagard 705 L concrete sealer on walls and floor.

Appendix B
Quality Control Testing Summary

Concrete

Continental Dam
Concrete QC test summary

Date Placed	Type	Design Strength (lb/in^2)	Unit Weight (lb/ft^3)	Air Content	Slump (inch)	7-day strength (lb/in^2)		7-day Avg. (lb/in^2)	28-day strength (lb/in^2)		28-day Avg. (lb/in^2)	% of Design	56-day strength (lb/in^2)		56-day Avg. (lb/in^2)	% of Design	X-day strength days	(lb/in^2)	% of Design	
5/31/2014	Backfill	3,000	143.3	5.6%	3.25	1,890	-	1,890	3,010	3,030	3,020	101%	-	-	-	-	-	-	-	
5/31/2014	Backfill	3,000	143.5	5.6%	2.50	1,820	-	1,820	2,930	2,920	2,930	98%	4,000	-	4,000	220%	-	-	-	
6/16/2014	Structural	4,000	146.8	4.2%	2.25	3,200	-	3,200	4,190	4,520	4,360	109%	-	-	-	-	-	-	-	
6/17/2014	Structural	4,000	143.8	5.5%	2.50	2,440	2,350	2,400	3,340	3,480	3,410	85%	-	-	-	-	84	4,370	109%	
6/20/2014	Structural	4,000	145.2	4.4%	2.25	3,260	3,220	3,240	4,360	4,400	4,380	110%	-	-	-	-	-	-	-	
6/23/2014	Structural	4,000	141.7	5.8%	4.25	2,680	2,640	2,660	3,360	3,420	3,390	85%	-	-	-	-	84	4,190	105%	
6/24/2014	Structural	4,000	144.4	4.6%	3.50	2,810	2,790	2,800	4,030	3,640	3,840	96%	4,380	-	4,380	156%	-	-	-	
6/25/2014	Structural	4,000	145.0	4.7%	3.00	2,870	2,820	2,850	3,860	3,790	3,830	96%	4,540	-	4,540	158%	-	-	-	
6/26/2014	Structural	4,000	143.1	5.6%	3.50	2,760	2,650	2,710	3,670	3,690	3,680	92%	-	-	-	-	84	4,390	110%	
6/27/2014	Structural	4,000	145.6	4.2%	2.50	3,070	3,200	3,140	4,310	4,250	4,280	107%	-	-	-	-	-	-	-	
6/30/2014	Structural	4,000	147.2	4.8%	2.25	3,160	3,130	3,150	3,970	3,910	3,940	99%	-	-	-	-	72	4,510	113%	
7/1/2014	Structural	4,000	144.2	4.4%	3.00	2,830	2,830	2,830	3,690	3,830	3,760	94%	-	-	-	-	71	4,590	115%	
7/2/2014	Structural	4,000	145.6	4.3%	2.25	2,970	2,990	2,980	4,140	4,130	4,140	104%	-	-	-	-	-	-	-	
7/3/2014	Structural	4,000	144.0	4.4%	2.75	2,540	2,610	2,580	3,630	3,510	3,570	89%	4,170	-	4,170	164%	-	-	-	
7/8/2014	Structural	4,000	145.2	4.6%	2.75	2,630	-	2,630	3,790	3,590	3,690	92%	4,190	-	4,190	159%	-	-	-	
7/11/2014	Structural	4,000	146.8	4.4%	2.25	3,040	2,900	2,970	4,040	4,150	4,100	103%	-	-	-	-	-	-	-	
7/14/2014	Structural	4,000	-	8.0%	2.25	2,850	2,750	2,800	3,590	3,530	3,560	89%	-	-	-	-	84	4,320	108%	
7/15/2014	Structural	4,000	145.4	4.8%	2.75	2,930	3,090	3,010	3,800	4,030	3,920	98%	-	-	-	-	84	4,890	122%	
7/16/2014	Structural	4,000	143.3	5.5%	4.00	2,300	2,510	2,410	3,390	3,390	3,390	85%	-	-	-	-	84	4,360	109%	
7/21/2014	Structural	4,000	139.1	4.6%	4.75	2,010	1,860	1,940	2,680	2,830	2,760	69%	-	-	-	-	112	3,710	93%	Cored
7/23/2014	Structural	4,000	139.1	6.0%	5.75	2,160	2,070	2,120	2,980	2,830	2,910	73%	-	-	-	-	112	3,930	98%	Cored
7/25/2014	Structural	4,000	142.5	4.9%	4.25	2,520	2,400	2,460	3,380	3,240	3,310	83%	-	-	-	-	84	4,480	112%	
7/29/2014	Backfill	3,000	137.9	7.8%	4.00	2,130	2,200	2,170	2,980	2,830	2,910	97%	-	-	-	-	84	4,060	135%	
7/30/2014	Structural	4,000	140.1	6.2%	5.25	2,470	2,510	2,490	3,320	3,290	3,310	83%	-	-	-	-	85	4,020	101%	
8/1/2014	Structural	4,000	141.1	5.3%	5.00	2,490	2,500	2,500	3,530	3,350	3,440	86%	-	-	-	-	84	3,760	94%	Cored
8/6/2014	Structural	4,000	144.4	4.0%	4.75	3,340	3,080	3,210	4,840	4,690	4,770	119%	-	-	-	-	-	-	-	
8/7/2014	Backfill	3,000	142.3	5.5%	5.25	1,820	1,700	1,760	2,570	2,560	2,570	86%	-	-	-	-	84	3,050	102%	
8/8/2014	Structural	4,000	140.9	5.8%	4.75	2,950	2,930	2,940	3,970	4,050	4,010	100%	-	-	-	-	84	5,180	130%	
8/12/2014	Structural	4,000	144.3	4.6%	5.00	3,070	3,240	3,160	4,230	4,270	4,250	106%	-	-	-	-	-	-	-	
8/13/2014	Structural	4,000	137.9	7.0%	5.00	2,950	2,940	2,950	3,570	3,760	3,670	92%	-	-	-	-	84	4,620	116%	
8/15/2014	Backfill	3,000	140.5	5.6%	4.75	1,700	-	1,700	2,370	2,340	2,360	79%	-	-	-	-	84	3,130	104%	
8/19/2014	Structural	4,000	143.8	4.6%	3.25	3,240	2,900	3,070	4,160	4,070	4,120	103%	-	-	-	-	-	-	-	
8/21/2014	Structural	4,000	137.9	7.0%	5.25	2,760	2,790	2,780	3,860	3,300	3,580	90%	-	-	-	-	-	4,180	105%	
8/25/2014	Structural	4,000	141.3	5.1%	4.25	3,350	3,570	3,460	3,600	4,240	3,920	98%	-	-	-	-	-	-	-	
9/2/2014	Structural	4,000	137.5	7.4%	6.25	3,010	2,740	2,880	3,590	3,800	3,700	93%	-	-	-	-	-	-	-	
9/3/2014	Structural	4,000	143.1	4.3%	4.75	3,310	3,340	3,330	4,180	4,640	4,410	110%	-	-	-	-	-	-	-	
9/4/2014	Structural	4,000	141.1	5.8%	5.00	3,360	3,410	3,390	4,390	4,560	4,480	112%	-	-	-	-	-	-	-	
9/5/2014	Structural	4,000	139.7	5.8%	6.25	2,850	2,810	2,830	4,100	3,960	4,030	101%	-	-	-	-	-	-	-	
9/10/2014	Structural	4,000	139.3	6.4%	5.25	2,980	2,980	2,980	4,250	4,240	4,250	106%	-	-	-	-	-	-	-	
9/12/2014	Structural	4,000	140.1	5.5%	6.00	2,800	2,790	2,800	3,920	3,840	3,880	97%	-	-	-	-	-	-	-	
9/16/2014	Structural	4,000	140.3	5.9%	5.50	3,310	3,180	3,250	4,440	4,340	4,390	110%	-	-	-	-	-	-	-	
9/23/2014	Structural	4,000	145.8	4.3%	5.00	3,840	3,840	3,840	5,150	5,230	5,190	130%	-	-	-	-	-	-	-	
9/24/2014	Structural	4,000	143.3	5.0%	4.75	3,270	3,570	3,420	5,230	4,770	5,000	125%	-	-	-	-	-	-	-	
9/27/2014	Structural	4,000	140.3	5.6%	5.25	3,200	2,890	3,050	4,020	4,290	4,160	104%	-	-	-	-	-	-	-	

Continental Dam
Concrete QC test summary

Date Placed	Type	Design Strength (lb/in^2)	Unit Weight (lb/ft^3)	Air Content	Slump (inch)	7-day strength (lb/in^2)		7-day Avg. (lb/in^2)	28-day strength (lb/in^2)		28-day Avg. (lb/in^2)	% of Design	56-day strength (lb/in^2)		56-day Avg. (lb/in^2)	% of Design	X-day strength days	(lb/in^2)	% of Design
10/2/2014	Structural	4,000	139.3	6.6%	4.75	3,450	3,480	3,470	4,300	4,360	4,330	108%	-	-	-	-	-	-	-
10/4/2014	Structural	4,000	138.9	6.7%	4.50	3,240	3,260	3,250	4,230	4,370	4,300	108%	-	-	-	-	-	-	-
10/10/2014	Structural	4,000	142.6	5.1%	5.25	4,010	3,870	3,940	5,180	5,370	5,280	132%	-	-	-	-	-	-	-
10/18/2014	Structural	4,000	142.4	5.4%	3.50	3,940	3,930	3,940	5,310	5,190	5,250	131%	-	-	-	-	-	-	-
10/21/2014	Structural	4,000	143.4	4.6%	3.00	4,640	4,540	4,590	5,810	5,590	5,700	143%	-	-	-	-	-	-	-
7/1/2015	Structural	4,000	136.2	4.8%	1.50	3,920	3,970	3,950	5,400	5,420	5,410	135%	-	-	-	-	-	-	-
7/16/2015	Backfill	3,000	130.0	9.0%	3.75	2,790	2,970	2,880	4,040	4,120	4,080	136%	-	-	-	-	-	-	-
7/17/2015	Backfill	3,000	130.6	8.6%	4.00	2,900	2,790	2,850	3,980	3,890	3,940	131%	-	-	-	-	-	-	-
7/21/2015	Backfill	3,000	130.0	8.7%	4.50	2,820	2,830	2,830	3,880	4,000	3,940	131%	-	-	-	-	-	-	-
7/22/2015	Backfill	3,000	135.6	5.8%	3.00	3,980	3,980	3,980	5,200	5,220	5,210	174%	-	-	-	-	-	-	-
7/23/2015	Backfill	3,000	138.0	3.5%	2.50	4,260	4,050	4,160	5,540	5,630	5,590	186%	-	-	-	-	-	-	-
7/24/2015	Backfill	3,000	-	3.7%	3.00	4,150	4,520	4,340	5,560	5,760	5,660	189%	-	-	-	-	-	-	-
8/5/2015	Structural	4,000	137.2	4.4%	1.75	4,010	4,320	4,170	5,660	5,330	5,500	138%	-	-	-	-	-	-	-
8/6/2015	Structural	4,000	137.0	5.0%	1.50	3,930	4,370	4,150	5,440	5,550	5,500	138%	-	-	-	-	-	-	-
8/7/2015	Structural	4,000	-	-	5.00	3,270	3,120	3,200	4,670	4,510	4,590	115%	-	-	-	-	-	-	-
8/10/2015	Structural	4,000	137.0	3.8%	1.50	3,770	3,830	3,800	4,730	4,700	4,720	118%	-	-	-	-	-	-	-
8/11/2015	Structural	4,000	136.0	5.5%	3.00	3,620	3,960	3,790	5,100	4,940	5,020	126%	-	-	-	-	-	-	-
8/12/2015	Structural	4,000	138.2	4.4%	1.50	4,410	4,470	4,440	5,840	6,000	5,920	148%	-	-	-	-	-	-	-
8/13/2015	Structural	4,000	137.2	4.8%	2.25	4,200	4,380	4,290	5,800	5,550	5,680	142%	-	-	-	-	-	-	-
8/14/2015	Structural	4,000	136.4	5.3%	2.00	4,380	4,050	4,220	5,450	5,500	5,480	137%	-	-	-	-	-	-	-
8/17/2015	Structural	4,000	137.0	4.7%	2.75	4,550	4,400	4,480	5,740	5,650	5,700	143%	-	-	-	-	-	-	-
8/18/2015	Structural	4,000	135.8	5.8%	4.50	3,800	3,850	3,830	5,000	5,060	5,030	126%	-	-	-	-	-	-	-
8/19/2015	Structural	4,000	136.8	5.1%	2.00	4,090	4,070	4,080	5,370	5,630	5,500	138%	-	-	-	-	-	-	-
8/20/2015	Structural	4,000	135.6	5.2%	3.00	4,070	3,990	4,030	5,490	5,600	5,550	139%	-	-	-	-	-	-	-
8/21/2015	Structural	4,000	137.8	4.2%	2.50	4,160	4,010	4,090	5,500	5,250	5,380	135%	-	-	-	-	-	-	-
8/24/2015	Structural	4,000	137.2	5.0%	4.50	3,840	3,730	3,790	5,070	5,020	5,050	126%	-	-	-	-	-	-	-
8/26/2015	Structural	4,000	136.4	5.1%	2.00	4,220	4,160	4,190	5,600	5,780	5,690	142%	-	-	-	-	-	-	-
8/28/2015	Structural	4,000	135.4	5.5%	3.00	3,490	3,600	3,550	5,230	5,110	5,170	129%	-	-	-	-	-	-	-
9/2/2015	Structural	4,000	136.0	5.6%	1.75	4,070	4,150	4,110	5,450	5,510	5,480	137%	-	-	-	-	-	-	-
9/4/2015	Structural	4,000	136.0	5.5%	3.00	3180	3,070	3,130	4,880	4,950	4,920	123%	-	-	-	-	-	-	-
9/10/2015	Structural	4,000	136.0	5.5%	2.75	3370	3,270	3,320	4,860	5,100	4,980	125%	-	-	-	-	-	-	-
9/15/2015	Structural	4,000	135.6	5.6%	2.75	3800	3,800	3,800	5,340	5,030	5,190	130%	-	-	-	-	-	-	-

Season 1

Western Technologies Inc.
The Quality People
Since 1955

278 Sawyer Drive, No. 2
Durango, CO 81303
(970) 375-9033

SAMPLING / TESTING OF PORTLAND CEMENT CONCRETE

Client **MOLTZ CONSTRUCTORS, INC.**
PO BOX 1030
CODY, WY 82414

Date of Report **07-09-14**
Job No. **3154JH043**
Event/Invoice No. **31540096-01** Lab No. **0430531-1**
Authorized By **GARY BORING** Date **05-30-14**
Sampled By **D. SENJEM** Date **05-31-14**
Submitted By **D. SENJEM** Date **06-02-14**

Client **MOLTZ CONSTRUCTORS, INC.**
Project **CONTINENTAL DAN REHIBILITATION PROJECT**
Location **SANTA MARIA IRRIGATION DISTRICT**
Source of Sample **UNDERDRAIN SLAB, STA:-1+00**
Architect/Engineer **EDWIN TOMS, P.E.**
Contractor **MOLTZ CONSTRUCTORS, INC,**
Supplier **SW READY MIX**
Truck/Ticket No. **182/21862** Mix Identification **312F** Maximum Size Aggregate **3/4** inches
Batch Size **10.0** cubic yards Required Strength **3000** psi @ **28** days Water Added Before Sampling **13** gallons
Time In Mixer **2** hours **36** minutes Ambient Air Temperature **52** °F Time Sampled **0928**

FRESHLY MIXED CONCRETE SAMPLED IN ACCORDANCE WITH **ASTM C172**
Deviations: **SAMPLED MIDDLE THIRD OF LOAD BY SINGLE DISCHARGE.**

FRESHLY MIXED CONCRETE TESTED IN ACCORDANCE WITH DESIGNATED SPECIFICATIONS
Unit Weight; **ASTM C138** **143.3** lbf/cu.ft. Temperature: **ASTM C1064** **64** °F
Air Content; **ASTM C231** **5.6** % Slump; **ASTM C143** **3 1/4** inches
Deviations: **ALL SAMPLE IDENTIFICATION AND FRESH CONCRETE TEST DATA WERE SUBMITTED BY WTI.**

CYLINDRICAL CONCRETE SPECIMENS MOLDED & CURED IN THE FIELD IN ACCORDANCE WITH **ASTM C31**
No. of Specimens Molded **4** Diameter/Length **4.00** in.x **8** in. Cross Sectional Area **12.57** sq. in.
Deviations: **SPECIMEN ENVIRONMENT WAS NOT MONITORED BY WT DURING INITIAL CURE.**

CYLINDRICAL CONCRETE SPECIMENS CURED & TESTED IN THE LABORATORY IN ACCORDANCE WITH **ASTM C31 & C39**

Specimen Marking If Any	Date Tested	Age In Days	Time Tested	COMPRESSIVE STRENGTH Maximum Load lbf	COMPRESSIVE STRENGTH Maximum Load lbf per sq.in.	Conformance Indicated?	Type of Fracture & Defects Noted	Tested By
0430531-1	06-07-14	7	14:02	23792	1890		TYPE 5	DS
0430531-1	06-28-14	28	11:19	37859	3010		TYPE 3	JH
0430531-1	06-28-14	28	11:21	38057	3030		TYPE 2	JH
0430531-1		HOLD						
	AVERAGE	28			3020	YES		

Comments:

Distribution : **MOLTZ CONSTRUCTORS, INC. (1)**

THE SERVICES REFERRED TO HEREIN WERE PERFORMED IN ACCORDANCE WITH THE STANDARD OF CARE PRACTICED LOCALLY FOR THE REFERENCED METHOD(S) AND RELATE ONLY TO THE CONDITION(S) OBSERVED OR SAMPLE(S) TESTED AT THE TIME AND PLACE STATED HEREIN WESTERN TECHNOLOGIES INC MAKES NO OTHER WARRANTY OR REPRESENTATION EXPRESSED OR IMPLIED, AND HAS NOT CONFIRMED INFORMATION INCLUDING SOURCE OF MATERIALS SUBMITTED BY OTHERS

REVIEWED BY **F. HAMPTON**
(SIGNED COPY ON FILE)

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The Quality People
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278 Sawyer Drive, No. 2
Durango, CO 81303
(970) 375-9033

SAMPLING / TESTING OF PORTLAND CEMENT CONCRETE

Client **MOLTZ CONSTRUCTORS, INC.**
PO BOX 1030
CODY, WY 82414

Date of Report **08-05-14**
Job No. **3154JH043**
Event/Invoice No. **31540096-02** Lab No. **0430531-2**
Authorized By **GARY BORING** Date **05-30-14**
Sampled By **D. SENJEM** Date **05-31-14**
Submitted By **D. SENJEM** Date **06-02-14**

Client **MOLTZ CONSTRUCTORS, INC.**
Project **CONTINENTAL DAM REHABILITATION PROJECT**
Location **SANTA MARIA IRREGATION DISTRICT**
Source of Sample **UNDERDRAIN SLAB, STA: 1+00**
Architect/Engineer **EDWIN A. TOMS, PE.**
Contractor **MOLTZ CONSTRUCTORS, INC,**
Supplier **SW READY MIX**
Truck/Ticket No. **292/21864** Mix Identification **312-F BF** Maximum Size Aggregate **3/4** inches
Batch Size **10.0** cubic yards Required Strength **3000** psi @ **28** days Water Added Before Sampling **14** gallons
Time In Mixer **3** hours **50** minutes Ambient Air Temperature **55** °F Time Sampled **1053**

FRESHLY MIXED CONCRETE SAMPLED IN ACCORDANCE WITH **ASTM C172**
Deviations: **SAMPLED MIDDLE THIRD OF LOAD BY SINGLE DISCHARGE.**

FRESHLY MIXED CONCRETE TESTED IN ACCORDANCE WITH DESIGNATED SPECIFICATIONS
Unit Weight; **ASTM C138** **143.5** lbf/cu.ft. Temperature: **ASTM C1064** **68** °F
Air Content; **ASTM C231** **5.6** % Slump; **ASTM C143** **2 1/2** inches
Deviations: **ALL SAMPLE IDENTIFICATION AND FRESH CONCRETE TEST DATA WERE SUBMITTED BY WTI.**

CYLINDRICAL CONCRETE SPECIMENS MOLDED & CURED IN THE FIELD IN ACCORDANCE WITH **ASTM C31**
No. of Specimens Molded **4** Diameter/Length **4.00** in.x **8** in. Cross Sectional Area **12.57** sq. in.
Deviations: **SPECIMEN ENVIRONMENT WAS NOT MONITORED BY WT DURING INITIAL CURE.**
SPECIMEN REMAINED IN UNSTRIPPED MORE THAN 48 HOURS

CYLINDRICAL CONCRETE SPECIMENS CURED & TESTED IN THE LABORATORY IN ACCORDANCE WITH **ASTM C31 & C39**

Specimen Marking If Any	Date Tested	Age In Days	Time Tested	COMPRESSIVE STRENGTH Maximum Load lbf	lbf per sq.in.	Conformance Indicated?	Type of Fracture & Defects Noted	Tested By
0430531-2	06-07-14	7	14:07	22888	1820		TYPE 5	DS
0430531-2	06-28-14	28	11:24	36770	2930		TYPE 2	GT
0430531-2	06-28-14	28	11:27	36742	2920		TYPE 3	GT
0430531-2	07-26-14	56	15:05	50229	4000	YES	TYPE 5	MW
	AVERAGE	28			2930	NO		

Comments:

Distribution : **MOLTZ CONSTRUCTORS, INC. (1)**

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(970) 375-9033

SAMPLING / TESTING OF PORTLAND CEMENT CONCRETE

Client **MOLTZ CONSTRUCTORS, INC.**
PO BOX 1030
CODY, WY 82414

Date of Report **07-15-14**
Job No. **3154JH043**
Event/Invoice No. **31540096-04** Lab No. **0430616-1**
Authorized By **GARY BORING** Date **06-13-14**
Sampled By **D. SENJEM** Date **06-16-14**
Submitted By **D. SENJEM** Date **06-18-14**

Client	**MOLTZ CONSTRUCTORS, INC.**
Project	**CONTINENTAL DAN REHIBILITATION PROJECT**
Location	**SANTA MARIA IRRIGATION DISTRICT**
Source of Sample	**SPILLWAY WALL, SIDE CHANNEL TOP OF WALL, STA: -1+35 LT**
Architect/Engineer	**EDWIN TOMS, P.E.**
Contractor	**MOLTZ CONSTRUCTORS, INC.**
Supplier	**SOUTHWEST READY MIX**

Truck/Ticket No. **308/4680 & 4681** Mix Identification **332 F/CD** Maximum Size Aggregate **3/4** inches
Batch Size **6.0** cubic yards Required Strength **4000** psi @ **28** days Water Added Before Sampling **5** gallons
Time In Mixer **1** hours **36** minutes Ambient Air Temperature **55** °F Time Sampled **1246**

FRESHLY MIXED CONCRETE SAMPLED IN ACCORDANCE WITH **ASTM C172**

Deviations: **SAMPLED MIDDLE THIRD OF LOAD BY SINGLE DISCHARGE**

FRESHLY MIXED CONCRETE TESTED IN ACCORDANCE WITH DESIGNATED SPECIFICATIONS

Unit Weight; **ASTM C138** **146.8** lbf/cu.ft. Temperature: **ASTM C1064** **70** °F
Air Content; **ASTM C231** **4.2** % Slump; **ASTM C143** **2.25** inches
Deviations: **ALL SAMPLE IDENTIFICATION AND TEST DATA SUBMITTED BY WTI**

CYLINDRICAL CONCRETE SPECIMENS MOLDED & CURED IN THE FIELD IN ACCORDANCE WITH **ASTM C31**

No. of Specimens Molded **4** Diameter/Length **4.00** in.x **8** in. Cross Sectional Area **12.57** sq. in.
Deviations: **SPECIMEN ENVIRONMENT NOT MONITERED BY WTI DURIBG INITIAL CURE**

CYLINDRICAL CONCRETE SPECIMENS CURED & TESTED IN THE LABORATORY IN ACCORDANCE WITH **ASTM C31 & C39**

Specimen Marking If Any	Date Tested	Age In Days	Time Tested	COMPRESSIVE STRENGTH Maximum Load lbf	COMPRESSIVE STRENGTH Maximum Load lbf per sq.in.	Conformance Indicated?	Type of Fracture & Defects Noted	Tested By
0430616-1	06-23-14	7	15:22	40220	3200		TYPE 5	MW
0430616-1	07-14-14	28	10:24	52689	4190		TYPE 5	MW
0430616-1	07-14-14	28	10:28	56789	4520		TYPE 5	MW
0430616-1		HOLD						
	AVERAGE	28			4360	YES		

Comments:

Distribution : **MOLTZ CONSTRUCTORS, INC. (1)**

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REVIEWED BY **F. HAMPTON**
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SAMPLING / TESTING OF PORTLAND CEMENT CONCRETE

Client **MOLTZ CONSTRUCTORS, INC.**
PO BOX 1030
CODY, WY 82414

Date of Report **10-09-14**
Job No. **3154JH043**
Event/Invoice No. **31540096-05** Lab No. **0430618-1**
Authorized By **GARY BORING** Date **06-17-14**
Sampled By **D. SENJEM** Date **06-18-14**
Submitted By **D. SENJEM** Date **06-19-14**

Client **MOLTZ CONSTRUCTORS, INC.**
Project **CONTINENTAL DAN REHIBILITATION PROJECT**
Location **SANTA MARIA IRRIGATION DISTRICT**
Source of Sample **CHANNEL WALL IWL-7, STA: -0+70 LT OF CL**
Architect/Engineer **EDWIN TOMS, P.E.**
Contractor **MOLTZ CONSTRUCTORS, INC.**
Supplier **SOUTHWEST READY MIX**
Truck/Ticket No. **308/4682&4683** Mix Identification **332 F/CD** Maximum Size Aggregate **3/4** inches
Batch Size **6.5** cubic yards Required Strength **4000** psi @ **28** days Water Added Before Sampling **12** gallons
Time In Mixer **2** hours **11** minutes Ambient Air Temperature **52** °F Time Sampled **1100**

FRESHLY MIXED CONCRETE SAMPLED IN ACCORDANCE WITH **ASTM C172**
Deviations: **SAMPLED MIDDLE THIRD OF LOAD BY SINGLE DISCHARGE**

FRESHLY MIXED CONCRETE TESTED IN ACCORDANCE WITH DESIGNATED SPECIFICATIONS
Unit Weight; **ASTM C138** **143.8** lbf/cu.ft. Temperature: **ASTM C1064** **68** °F
Air Content; **ASTM C231** **5.5** % Slump; **ASTM C143** **2.50** inches
Deviations: **SAMPLE IDENTIFICATION AND FRESH CONCRETE TEST DATA SUBMITTED BY WTI**

CYLINDRICAL CONCRETE SPECIMENS MOLDED & CURED IN THE FIELD IN ACCORDANCE WITH **ASTM C31**
No. of Specimens Molded **5** Diameter/Length **4.00** in.x **8** in. Cross Sectional Area **12.57** sq. in.
Deviations: **SPECIMEN ENVIRONMENT NOT MONITERED BY WTI DURING INITIAL CURE**

CYLINDRICAL CONCRETE SPECIMENS CURED & TESTED IN THE LABORATORY IN ACCORDANCE WITH **ASTM C31 & C39**

Specimen Marking If Any	Date Tested	Age In Days	Time Tested	COMPRESSIVE STRENGTH Maximum Load lbf	COMPRESSIVE STRENGTH Maximum Load lbf per sq.in.	Conformance Indicated?	Type of Fracture & Defects Noted	Tested By
0430618-1	06-25-14	7	18:15	30635	2440		TYPE 5	FH
0430618-1	06-25-14	7	18:20	29575	2350		TYPE 5	FH
0430618-1	07-16-14	28	18:42	41959	3340		TYPE 3	DS
0430618-1	07-16-14	28	18:48	43782	3480		TYPE 5	DS
0430618-1	09-10-14	84	08:59	54979	4370	YES	TYPE 5	JAH
	AVERAGE	7			2400			
	AVERAGE	28			3410	NO		

Comments:

Distribution : **MOLTZ CONSTRUCTORS, INC. (1)**

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SAMPLING / TESTING OF PORTLAND CEMENT CONCRETE

Client **MOLTZ CONSTRUCTORS, INC.**
PO BOX 1030
CODY, WY 82414

Date of Report **07-22-14**
Job No. **3154JH043**
Event/Invoice No. **31540096-06** Lab No. **0430620-1**
Authorized By **GARY BORING** Date **06-19-14**
Sampled By **D. SENJEM** Date **06-20-14**
Submitted By **J. HATCH** Date **06-21-14**

Client	**MOLTZ CONSTRUCTORS, INC.**
Project	**CONTINENTAL DAN REHIBILITATION PROJECT**
Location	**SANTA MARIA IRRIGATION DISTRICT**
Source of Sample	**CHANNEL WALL IW-4, STA: -1+29**
Architect/Engineer	**EDWIN TOMS, P.E.**
Contractor	**MOLTZ CONSTRUCTORS, INC.**
Supplier	**SOUTHWEST READY MIX**

Truck/Ticket No. **308/4706** Mix Identification **332 FC/D** Maximum Size Aggregate **3/4** inches
Batch Size **3.5** cubic yards Required Strength **4000** psi @ **28** days Water Added Before Sampling **5** gallons
Time In Mixer **1** hours **12** minutes Ambient Air Temperature **75** °F Time Sampled **1315**

FRESHLY MIXED CONCRETE SAMPLED IN ACCORDANCE WITH **ASTM C172**

Deviations: **SAMPLED MIDDLE THIRD OF LOAD BY SINGLE DISCHARGE**

FRESHLY MIXED CONCRETE TESTED IN ACCORDANCE WITH DESIGNATED SPECIFICATIONS

Unit Weight; **ASTM C138** **145.2** lbf/cu.ft. Temperature: **ASTM C1064** **77** °F
Air Content; **ASTM C231** **4.4** % Slump; **ASTM C143** **2.25** inches
Deviations: **ALL SAMPLE IDENTIFICATION AND FRESH CONCRETE TEST DATA SUBMITTED BY WTI**

CYLINDRICAL CONCRETE SPECIMENS MOLDED & CURED IN THE FIELD IN ACCORDANCE WITH **ASTM C31**

No. of Specimens Molded **5** Diameter/Length **4.00** in.x **8** in. Cross Sectional Area **12.57** sq. in.
Deviations: **SPECIMEN ENVIRONMENT NOT MONITERED BY WTI DURING INITIAL CURE**

CYLINDRICAL CONCRETE SPECIMENS CURED & TESTED IN THE LABORATORY IN ACCORDANCE WITH **ASTM C31 & C39**

Specimen Marking If Any	Date Tested	Age In Days	Time Tested	COMPRESSIVE STRENGTH Maximum Load lbf	COMPRESSIVE STRENGTH Maximum Load lbf per sq.in.	Conformance Indicated?	Type of Fracture & Defects Noted	Tested By
0430620-1	06-27-14	7	16:35	41012	3260		TYPE 5	FH
0430620-1	06-27-14	7	16:40	40526	3220		TYPE 5	FH
0430620-1	07-18-14	28	17:02	54809	4360		TYPE 5	DS
0430620-1	07-18-14	28	17:08	55347	4400		TYPE 5	DS
0430620-1		HOLD						
	AVERAGE	7			3240			
	AVERAGE	28			4380	YES		

Comments:

Distribution : **MOLTZ CONSTRUCTORS, INC. (1)**

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FIELD REPORT ON JOB SITE CONDITIONS

Client MOLTZ CONST.
Permit No.
Project CONTINENTAL DAM REHAB
Location HINSDALE CO., COLO.
Prime Contractor CLIENT
Code(s)

Report No. Page 1 of 1
Job No. 3154JH043
Event / Invoice No.
Authorized By CLIENT Date 6-20-14
Superintendent DARBY DUNN
Observations By DAN S. Date 6-21-14

REPORT

OBSERVATIONS & ACTION TAKEN: ARR. ON SITE AT 11:30 AM TO PICK-UP 5-CONCRETE CYLINDERS FORMED YESTERDAY AFTERNOON FOR COMPRESSIVE STRENGTH BREAKS.

ALSO, TO LET THE CLIENT KNOW THE MOISTURE CONTENT RESULTS OF THE CONCRETE AGGREGATE SAMPLES TAKEN YESTERDAY FROM THE STOCKPILES AT SW READY MIX BATCH PLANT.

THE CONC. SAND HAD A MOISTURE CONTENT OF 6.13% AND CONCRETE COURSE MATERIAL WAS 2.98%.

White – File; Yellow – Processing For Final Report; Pink – Preliminary Field Copy, Subject To Review

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SAMPLING / TESTING OF PORTLAND CEMENT CONCRETE

Client **MOLTZ CONSTRUCTORS, INC.**
PO BOX 1030
CODY, WY 82414

Date of Report **09-15-14**
Job No. **3154JH043**
Event/Invoice No. **31540096-07** Lab No. **0430623-1**
Authorized By **GARY BORING** Date **06-20-14**
Sampled By **WT/D. SENJEM** Date **06-23-14**
Submitted By **WT/M. WARREN** Date **06-24-14**

Client **MOLTZ CONSTRUCTORS, INC.**
Project **CONTINENTAL DAM REHABILITATION PROJECT**
Location **SANTA MARIA IRRIGATION DISTRICT**
Source of Sample **WALL IWR-4, STA: 1+30 RT**
Architect/Engineer **EDWIN TOMS, P.E.**
Contractor **MOLTZ CONSTRUCTORS, INC.**
Supplier **SOUTHWEST READY MIX**
Truck/Ticket No. **308/4708** Mix Identification **332-F C/D** Maximum Size Aggregate **3/4** inches
Batch Size **3.5** cubic yards Required Strength **4000** psi @ **28** days Water Added Before Sampling **4** gallons
Time In Mixer **1** hours **23** minutes Ambient Air Temperature **61** °F Time Sampled **1028**

FRESHLY MIXED CONCRETE SAMPLED IN ACCORDANCE WITH **ASTM C172**
Deviations: **SAMPLED MIDDLE THIRD OF LOAD BY SINGLE DISCHARGE.**

FRESHLY MIXED CONCRETE TESTED IN ACCORDANCE WITH DESIGNATED SPECIFICATIONS
Unit Weight; **ASTM C138** **141.7** lbf/cu.ft. Temperature: **ASTM C1064** **65** °F
Air Content; **ASTM C231** **5.8** % Slump; **ASTM C143** **4 1/4** inches
Deviations: **ALL SAMPLE IDENTIFICATION AND FRESH CONCRETE TEST DATA WERE SUBMITTED BY WTI.**

CYLINDRICAL CONCRETE SPECIMENS MOLDED & CURED IN THE FIELD IN ACCORDANCE WITH **ASTM C31**
No. of Specimens Molded **5** Diameter/Length **4.00** in. x **8** in. Cross Sectional Area **12.57** sq. in.
Deviations: **SPECIMEN ENVIRONMENT WAS NOT MONITORED BY WT DURING INITIAL CURE.**

CYLINDRICAL CONCRETE SPECIMENS CURED & TESTED IN THE LABORATORY IN ACCORDANCE WITH **ASTM C31 & C39**

Specimen Marking If Any	Date Tested	Age In Days	Time Tested	COMPRESSIVE STRENGTH Maximum Load lbf	lbf per sq.in.	Conformance Indicated?	Type of Fracture & Defects Noted	Tested By
0430623-1	06-30-14	7	17:45	33688	2680		TYPE 5	FH
0430623-1	06-30-14	7	17:50	33236	2640		TYPE 5	FH
0430623-1	07-21-14	28	15:18	42227	3360		TYPE 2	DS
0430623-1	07-21-14	28	15:30	43005	3420		TYPE 5	DS
0430623-1	09-15-14	84	10:13	52618	4190	YES	TYPE 2	JAH
	AVERAGE	7			2660			
	AVERAGE	28			3390	NO		

Comments:

Distribution : **MOLTZ CONSTRUCTORS, INC. (1)**

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SAMPLING / TESTING OF PORTLAND CEMENT CONCRETE

Client **MOLTZ CONSTRUCTORS, INC.**
PO BOX 1030
CODY, WY 82414

Date of Report **08-20-14**
Job No. **3154JH043**
Event/Invoice No. **3150096-08** Lab No. **0430624-1**
Authorized By **GARY BORING** Date **06-20-14**
Sampled By **D. SENJEM** Date **06-24-14**
Submitted By **D. SENJEM** Date **06-26-14**

Client	**MOLTZ CONSTRUCTORS, INC.**
Project	**CONTINENTAL DAMREHABILITATION PROJECT**
Location	**SANTA MARIA IRRIGATION DISTRICT**
Source of Sample	**WALL, IWL-6, STATION: -0+90 @ CL LT.**
Architect/Engineer	**EDWIN TOMS, P.E.**
Contractor	**MOLTZ CONSTRUCTORS, INC.**
Supplier	**SOUTHWEST READY MIX**

Truck/Ticket No. **308/4720+4721** Mix Identification **332-F C/D** Maximum Size Aggregate **3/4** inches
Batch Size **5.5** cubic yards Required Strength **4000** psi @ **28** days Water Added Before Sampling **0** gallons
Time In Mixer **1** hours **56** minutes Ambient Air Temperature **70** °F Time Sampled **1348**

FRESHLY MIXED CONCRETE SAMPLED IN ACCORDANCE WITH **ASTM C172**

Deviations: **SAMPLED MIDDLE THIRD OF LOAD BY SINGLE DISCHARGE**

FRESHLY MIXED CONCRETE TESTED IN ACCORDANCE WITH DESIGNATED SPECIFICATIONS

Unit Weight; **ASTM C138** **144.4** lbf/cu.ft. Temperature: **ASTM C1064** **76** °F
Air Content; **ASTM C231** **4.6** % Slump; **ASTM C143** **3 1/2** inches
Deviations: **ALL IDENTIFICATION AND FRESH CONCRETE TEST DATA WERE SUBMITTED BY WTI**

CYLINDRICAL CONCRETE SPECIMENS MOLDED & CURED IN THE FIELD IN ACCORDANCE WITH **ASTM C31**

No. of Specimens Molded **5** Diameter/Length **4.00** in.x **8** in. Cross Sectional Area **12.57** sq. in.
Deviations: **SPECIMEN ENVIRONMENT WAS NOT MONITERED BY WTI DURING INITIAL CURE**

CYLINDRICAL CONCRETE SPECIMENS CURED & TESTED IN THE LABORATORY IN ACCORDANCE WITH **ASTM C31 & C39**

Specimen Marking If Any	Date Tested	Age In Days	Time Tested	COMPRESSIVE STRENGTH Maximum Load lbf	COMPRESSIVE STRENGTH Maximum Load lbf per sq.in.	Conformance Indicated?	Type of Fracture & Defects Noted	Tested By
0430624-1	**07-01-14**	**7**	**14:04**	**35357**	**2810**		**TYPE 5**	**JH**
0430624-1	**07-01-14**	**7**	**14:07**	**35003**	**2790**		**TYPE 5**	**JH**
0430624-1	**07-22-14**	**28**	**08:59**	**50611**	**4030**		**TYPE 2**	**GT**
0430624-1	**07-22-14**	**28**	**09:03**	**45733**	**3640**		**TYPE 3**	**GT**
0430624-1	**08-19-14**	**56**	**10:07**	**55036**	**4380**	**YES**	**TYPE 5**	**JAH**
	AVERAGE	**7**			**2800**			
	AVERAGE	**28**			**3840**	**NO**		

Comments:

Distribution : **MOLTZ CONSTRUCTORS, INC. (1)**

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SAMPLING / TESTING OF PORTLAND CEMENT CONCRETE

Client **MOLTZ CONSTRUCTORS, INC.**
PO BOX 1030
CODY, WY 82414

Date of Report **08-22-14**
Job No. **3154JH043**
Event/Invoice No. **31540096-09** Lab No. **0430625-1**
Authorized By **GARY BORING** Date **06-20-14**
Sampled By **D. SENJEM** Date **06-25-14**
Submitted By **D. SENJEM** Date **06-26-14**

Client **MOLTZ CONSTRUCTORS, INC.**
Project **CONTINENTAL DAMREHABILITATION PROJECT**
Location **SANTA MARIA IRRIGATION DISTRICT**
Source of Sample **CHANNEL WALL IWR-7, STA: -0+72,RT OF CL 4' ELEVATION**
Architect/Engineer **EDWIN TOMS, P.E.**
Contractor **MOLTZ CONSTRUCTORS, INC.**
Supplier **SOUTHWEST READY MIX**
Truck/Ticket No. **308/4728,4729** Mix Identification **332-F/CD** Maximum Size Aggregate **3/4** inches
Batch Size **6.0** cubic yards Required Strength **4000** psi @ **28** days Water Added Before Sampling **5** gallons
Time In Mixer **1** hours **31** minutes Ambient Air Temperature **62** °F Time Sampled **0942**

FRESHLY MIXED CONCRETE SAMPLED IN ACCORDANCE WITH **ASTM C172**
Deviations: **SAMPLED MIDDLE THIRD OF LOAD BY SINGLE DISCHARGE**

FRESHLY MIXED CONCRETE TESTED IN ACCORDANCE WITH DESIGNATED SPECIFICATIONS
Unit Weight; **ASTM C138** **145.0** lbf/cu.ft. Temperature: **ASTM C1064** **66** °F
Air Content; **ASTM C231** **4.7** % Slump; **ASTM C143** **3** inches
Deviations: **ALL SAMPLE IDENTIFICATION AND FRESH CONCRETE TEST DATA WERE SUBMITTED BY WTI**

CYLINDRICAL CONCRETE SPECIMENS MOLDED & CURED IN THE FIELD IN ACCORDANCE WITH **ASTM C31**
No. of Specimens Molded **5** Diameter/Length **4.00** in x **8** in Cross Sectional Area **12.57** sq. in.
Deviations: **SPECIMEN ENVIORNMENT WAS NOT MONITERED BY DURING INITIAL CURE**

CYLINDRICAL CONCRETE SPECIMENS CURED & TESTED IN THE LABORATORY IN ACCORDANCE WITH **ASTM C31 & C39**

Specimen Marking If Any	Date Tested	Age In Days	Time Tested	COMPRESSIVE STRENGTH Maximum Load lbf	lbf per sq.in.	Conformance Indicated?	Type of Fracture & Defects Noted	Tested By
0430625-1	07-02-14	7	13:10	36078	2870		TYPE 2	GT
0430625-1	07-02-14	7	13:15	35399	2820		TYPE 2	GT
0430625-1	07-23-14	28	14:28	48504	3860		TYPE 2	GT
0430625-1	07-23-14	28	14:31	47599	3790		TYPE 4	GT
0430625-1	08-20-14	56	16:24	57029	4540	YES	TYPE 3	GT
	AVERAGE	7			2850			
	AVERAGE	28			3830	NO		

Comments:

Distribution : **MOLTZ CONSTRUCTORS, INC. (1)**

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REVIEWED BY **B. MCCALL**
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SAMPLING / TESTING OF PORTLAND CEMENT CONCRETE

Client **MOLTZ CONSTRUCTORS, INC.**
PO BOX 1030
CODY, WY 82414

Date of Report **09-18-14**
Job No. **3154JH043**
Event/Invoice No. **31540096-10** Lab No. **0430626-1**
Authorized By **GARY BORING** Date **06-20-14**
Sampled By **D. SENJEM** Date **06-26-14**
Submitted By **D. SENJEM** Date **06-27-14**

Client	**MOLTZ CONSTRUCTORS, INC.**
Project	**CONTINENTAL DAMREHABILITATION PROJECT**
Location	**SANTA MARIA IRRIGATION DISTRICT**
Source of Sample	**SIDE CHANNEL WALL, STATION -0+44 RT, IWR-5**
Architect/Engineer	**EDWIN TOMS, P.E.**
Contractor	**MOLTZ CONSTRUCTORS, INC.**
Supplier	**SOUTHWEST READY MIX**

Truck/Ticket No. **308/4737** | Mix Identification **332-F/CD** | Maximum Size Aggregate **3/4** inches
Batch Size **4.0** cubic yards | Required Strength **4000** psi @ **28** days | Water Added Before Sampling **0** gallons
Time In Mixer **1** hours **12** minutes | Ambient Air Temperature **52** °F | Time Sampled **0948**

FRESHLY MIXED CONCRETE SAMPLED IN ACCORDANCE WITH **ASTM C172**

Deviations: **SAMPLED MIDDLE THIRD OF LOAD BY SINGLE DISCHARGE**

FRESHLY MIXED CONCRETE TESTED IN ACCORDANCE WITH DESIGNATED SPECIFICATIONS

Unit Weight; **ASTM C138** **143.1** lbf/cu.ft. Temperature: **ASTM C1064** **69** °F
Air Content; **ASTM C231** **5.6** % Slump; **ASTM C143** **3.5** inches
Deviations: **ALL SAMPLE IDENTIFICATION AND FRESH CONCRETE TEST DATA WERE SUBMITTED BY WTI**

CYLINDRICAL CONCRETE SPECIMENS MOLDED & CURED IN THE FIELD IN ACCORDANCE WITH **ASTM C31**

No. of Specimens Molded **5** Diameter/Length **4.00** in x **8** in Cross Sectional Area **12.57** sq. in.
Deviations: **SPECIMEN ENVIORNMENT WAS NOT MONITERED BY DURING INITIAL CURE**

CYLINDRICAL CONCRETE SPECIMENS CURED & TESTED IN THE LABORATORY IN ACCORDANCE WITH **ASTM C31 & C39**

Specimen Marking If Any	Date Tested	Age In Days	Time Tested	COMPRESSIVE STRENGTH Maximum Load lbf	COMPRESSIVE STRENGTH Maximum Load lbf per sq.in.	Conformance Indicated?	Type of Fracture & Defects Noted	Tested By
0430626-1	07-03-14	7	15:25	34664	2760		TYPE 5	DS
0430626-1	07-03-14	7	15:29	33321	2650		TYPE 4	DS
0430626-1	07-24-14	28	13:53	46172	3670		TYPE 3	MW
0430626-1	07-24-14	28	13:56	46384	3690		TYPE 5	MW
0430626-1	09-18-14	84	09:16	55149	4390	YES	TYPE 2	JAH
	AVERAGE	7			2710			
	AVERAGE	28			3680	NO		

Comments:

Distribution : **MOLTZ CONSTRUCTORS, INC. (1)**

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(970) 375-9033

SAMPLING / TESTING OF PORTLAND CEMENT CONCRETE

Client **MOLTZ CONSTRUCTORS, INC.**
PO BOX 1030
CODY, WY 82414

Date of Report **08-04-14**
Job No. **3154JH043**
Event/Invoice No. **31540096-11** Lab No. **0430627-1**
Authorized By **GARY BORING** Date **06-20-14**
Sampled By **WT/D. SENJEM** Date **06-27-14**
Submitted By **WT/D. SENJEM** Date **06-30-14**

Client **MOLTZ CONSTRUCTORS, INC.**
Project **CONTINENTAL DAM REHABILITATION PROJECT**
Location **SANTA MARIA IRRIGATION DISTRICT**
Source of Sample **SIDE CHANNEL WALL, IWL-5, STATION:0+60, TOP LIFT**
Architect/Engineer **EDWIN TOMS, P.E.**
Contractor **MOLTZ CONSTRUCTORS, INC.**
Supplier **SOUTHWEST READY-MIX, INC.**

Truck/Ticket No. **308/4746** Mix Identification **332-F/CD** Maximum Size Aggregate **3/4** inches
Batch Size **6.0** cubic yards Required Strength **4000** psi @ **28** days Water Added Before Sampling **0** gallons
Time In Mixer **1** hours **37** minutes Ambient Air Temperature **53** °F Time Sampled **0940**

FRESHLY MIXED CONCRETE SAMPLED IN ACCORDANCE WITH **ASTM C172**

Deviations: **SAMPLED MIDDLE THIRD OF LOAD BY SINGLE DISCHARGE.**

FRESHLY MIXED CONCRETE TESTED IN ACCORDANCE WITH DESIGNATED SPECIFICATIONS

Unit Weight; **ASTM C138** **145.6** lbf/cu.ft. Temperature: **ASTM C1064** **70** °F
Air Content; **ASTM C231** **4.2** % Slump; **ASTM C143** **2 1/2** inches
Deviations: **ALL SAMPLE IDENTIFICATION AND FRESH CONCRETE TEST DATA WERE SUBMITTED BY WTI.**

CYLINDRICAL CONCRETE SPECIMENS MOLDED & CURED IN THE FIELD IN ACCORDANCE WITH **ASTM C31**

No. of Specimens Molded **5** Diameter/Length **4.00** in. x **8** in. Cross Sectional Area **12.57** sq. in.
Deviations: **SPECIMEN ENVIRONMENT WAS NOT MONITORED BY WT DURING INITIAL CURE.**
SPECIMENS REMAINED IN FIELD MORE THAN 48 HOURS.

CYLINDRICAL CONCRETE SPECIMENS CURED & TESTED IN THE LABORATORY IN ACCORDANCE WITH **ASTM C31 & C39**

Specimen Marking If Any	Date Tested	Age In Days	Time Tested	COMPRESSIVE STRENGTH Maximum Load lbf	lbf per sq.in.	Conformance Indicated?	Type of Fracture & Defects Noted	Tested By
0430627-1	**07-03-14**	**6**	**15:05**	**38552**	**3070**		**TYPE 5**	**DS**
0430627-1	**07-03-14**	**6**	**15:18**	**40163**	**3200**		**TYPE 5**	**DS**
0430627-1	**07-25-14**	**28**	**19:04**	**54202**	**4310**		**TYPE 3**	**GT**
0430627-1	**07-25-14**	**28**	**19:07**	**53410**	**4250**		**TYPE 3**	**GT**
0430627-1		**HOLD**						
	AVERAGE	**6**			**3140**			
	AVERAGE	**28**			**4280**	**YES**		

Comments:

Distribution : **MOLTZ CONSTRUCTORS, INC. (1)**

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SAMPLING / TESTING OF PORTLAND CEMENT CONCRETE

Client **MOLTZ CONSTRUCTORS, INC.**
PO BOX 1030
CODY, WY 82414

Date of Report **10-09-14**
Job No. **3154JH043**
Event/Invoice No. **31540096-13** Lab No. **0430630-1**
Authorized By **GARY BORING** Date **06-27-14**
Sampled By **D. SENJEM** Date **06-30-14**
Submitted By **D. SENJEM** Date **07-03-14**

Client **MOLTZ CONSTRUCTORS, INC.**
Project **CONTINENTAL DAM REHABILITATION PROJECT**
Location **SANTA MARIA IRRIGATION DISTRICT**
Source of Sample **CHANNEL SIDE WALL IWR-2, STA:-1+55, CL RT**
Architect/Engineer **EDWIN TOMS, P.E.**
Contractor **MOLTZ CONSTRUCTORS, INC.**
Supplier **SOUTHWEST READY MIX**
Truck/Ticket No. **308/4748** Mix Identification **332-F, C/D** Maximum Size Aggregate **3/4** inches
Batch Size **32.5** cubic yards Required Strength **4000** psi @ **28** days Water Added Before Sampling **0** gallons
Time In Mixer **1** hours **14** minutes Ambient Air Temperature **66** °F Time Sampled **0917**

FRESHLY MIXED CONCRETE SAMPLED IN ACCORDANCE WITH **ASTM C172**
Deviations: **SAMPLED MIDDLE THIRD OF LOAD BY SINGLE DISCHARGE**

FRESHLY MIXED CONCRETE TESTED IN ACCORDANCE WITH DESIGNATED SPECIFICATIONS
Unit Weight; **ASTM C138** **147.2** lbf/cu.ft. Temperature: **ASTM C1064** **68** °F
Air Content; **ASTM C231** **4.8** % Slump: **ASTM C143** **2.25** inches
Deviations: **ALL SAMPLED IDENTIFICATION AND FRESH CONCRETE TEST DATA SUBMITTED BY WTI**

CYLINDRICAL CONCRETE SPECIMENS MOLDED & CURED IN THE FIELD IN ACCORDANCE WITH **ASTM C31**
No. of Specimens Molded **5** Diameter/Length **4.00** in.x **8** in. Cross Sectional Area **12.57** sq. in.
Deviations: **SPECIMEN ENVIORNMENT NOT MONITERED BY WTI DURING INITIAL CURE**

CYLINDRICAL CONCRETE SPECIMENS CURED & TESTED IN THE LABORATORY IN ACCORDANCE WITH **ASTM C31 & C39**

Specimen Marking If Any	Date Tested	Age In Days	Time Tested	COMPRESSIVE STRENGTH Maximum Load lbf	COMPRESSIVE STRENGTH Maximum Load lbf per sq.in.	Conformance Indicated?	Type of Fracture & Defects Noted	Tested By
0430630-1	07-08-14	8	10:05	39767	3160		TYPE 4	MW
0430630-1	07-08-14	8	10:08	39357	3130		TYPE 4	MW
0430630-1	07-28-14	28	17:04	49847	3970		TYPE 5	MW
0430630-1	07-28-14	28	17:08	49084	3910		TYPE 5	MW
0430630-1	09-10-14	72	10:34	56746	4510	YES	TYPE 5	JAH
	AVERAGE	8			3150			
	AVERAGE	28			3940	NO		

Comments:

Distribution : **MOLTZ CONSTRUCTORS, INC. (1)**

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SAMPLING / TESTING OF PORTLAND CEMENT CONCRETE

Client **MOLTZ CONSTRUCTORS, INC.**
PO BOX 1030
CODY, WY 82414

Date of Report **10-09-14**
Job No. **3154JH043**
Event/Invoice No. **31540118-01** Lab No. **0430701-1**
Authorized By **GARY BORING** Date **06-27-14**
Sampled By **D. SENJEM** Date **07-01-14**
Submitted By **D. SENJEM** Date **07-03-14**

Client **MOLTZ CONSTRUCTORS, INC.**
Project **CONTINENTAL DAM REHABILITATION PROJECT**
Location **SANTA MARIA IRRAGATION DISTRICT**
Source of Sample **CHANNEL SIDE WALL IWL-8, STATION: 0+82, CL, MID DEPTH**
Architect/Engineer **EDWIN TOMS, P.E.**
Contractor **MOLTZ CONSTRUCTORS, INC.**
Supplier **SOUTHWEST READY MIX**
Truck/Ticket No. **308/NONE GIVEN** Mix Identification **332-F/CD** Maximum Size Aggregate **3/4** inches
Batch Size **7.5** cubic yards Required Strength **4000** psi @ **28** days Water Added Before Sampling **0** gallons
Time In Mixer **1** hours **58** minutes Ambient Air Temperature **61** °F Time Sampled **1000**

FRESHLY MIXED CONCRETE SAMPLED IN ACCORDANCE WITH **ASTM C172**
Deviations: **SAMPLED MIDDLE THIRD OF LOAD BY SINGLE DISCHARGE**

FRESHLY MIXED CONCRETE TESTED IN ACCORDANCE WITH DESIGNATED SPECIFICATIONS
Unit Weight; **ASTM C138** **144.2** lbf/cu.ft. Temperature: **ASTM C1064** **72** °F
Air Content; **ASTM C231** **4.4** % Slump; **ASTM C143** **3** Inches
Deviations: **ALL SAMPLE IDENTIFICATION AND FRESH CONCRETE TEST DATA WERE SUBMITTED BY WTI**

CYLINDRICAL CONCRETE SPECIMENS MOLDED & CURED IN THE FIELD IN ACCORDANCE WITH **ASTM C31**
No. of Specimens Molded **5** Diameter/Length **4.00** In.x **8** in. Cross Sectional Area **12.57** sq. in.
Deviations: **SPECIMEN ENVIRONMENT WAS NOT MONITERED BY WTI DURING INITIAL CURE**

CYLINDRICAL CONCRETE SPECIMENS CURED & TESTED IN THE LABORATORY IN ACCORDANCE WITH **ASTM C31 & C39**

Specimen Marking If Any	Date Tested	Age In Days	Time Tested	COMPRESSIVE STRENGTH Maximum Load lbf	COMPRESSIVE STRENGTH Maximum Load lbf per sq.in.	Conformance Indicated?	Type of Fracture & Defects Noted	Tested By
0430701-1	07-08-14	7	13:00	35555	2830		TYPE 5	MW
0430701-1	07-08-14	7	13:03	35583	2830		TYPE 5	MW
0430701-1	07-29-14	28	18:56	46341	3690		TYPE 5	DS
0430701-1	07-29-14	28	19:01	48123	3830		TYPE 5	DS
0430701-1	09-10-14	71	10:30	57708	4590	YES	TYPE 2	JAH
	AVERAGE	7			2830			
	AVERAGE	28			3760	NO		

Comments:

Distribution : **MOLTZ CONSTRUCTORS, INC. (1)**

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SAMPLING / TESTING OF PORTLAND CEMENT CONCRETE

Client **MOLTZ CONSTRUCTORS, INC.**
PO BOX 1030
CODY, WY 82414

Date of Report **08-04-14**
Job No. **3154JH043**
Event/Invoice No. **31540118-02** Lab No. **0430702-1**
Authorized By **GARY BORING** Date **06-27-14**
Sampled By **D. SENJEM** Date **07-02-14**
Submitted By **D. SENJEM** Date **07-03-14**

Client **MOLTZ CONSTRUCTORS, INC.**
Project **CONTINENTAL DAM REHABILITATION PROJECT**
Location **SANTA MARIA IRRIGATION DISTRICT**
Source of Sample **SIDE CHANNEL WALL IWR-8, STA: -0+50 RT, MID HEIGHT OF WALL**
Architect/Engineer **EDWIN TOMS, P.E.**
Contractor **MOLTZ CONSTRUCTORS, INC.**
Supplier **SOUTHWEST READY MIX**
Truck/Ticket No. **308/4777 & 4778** Mix Identification **332-F/CD** Maximum Size Aggregate **1005** inches
Batch Size **7.5** cubic yards Required Strength **4000** psi @ **28** days Water Added Before Sampling **7** gallons
Time In Mixer **1** hours **30** minutes Ambient Air Temperature **63** °F Time Sampled **1005**

FRESHLY MIXED CONCRETE SAMPLED IN ACCORDANCE WITH **ASTM C172**
Deviations: **SAMPLED MIDDLE THIRD OF LOAD BY SINGLE DISCHARGE**

FRESHLY MIXED CONCRETE TESTED IN ACCORDANCE WITH DESIGNATED SPECIFICATIONS
Unit Weight; **ASTM C138** **145.6** lbf/cu.ft. Temperature: **ASTM C1064** **72** °F
Air Content; **ASTM C231** **4.3** % Slump; **ASTM C143** **2 1/4** inches
Deviations: **ALL SAMPLE IDENTIFICATION AND FRESH CONCRETE TEST DATA WERE SUBMITTED BY WTI**

CYLINDRICAL CONCRETE SPECIMENS MOLDED & CURED IN THE FIELD IN ACCORDANCE WITH **ASTM C31**
No. of Specimens Molded **5** Diameter/Length **4.00** in.x **8** in. Cross Sectional Area **12.57** sq. in.
Deviations: **SPECIMEN ENVIORNMENT WAS NOT MONITERED DURING INITIAL CURE**

CYLINDRICAL CONCRETE SPECIMENS CURED & TESTED IN THE LABORATORY IN ACCORDANCE WITH **ASTM C31 & C39**

Specimen Marking If Any	Date Tested	Age In Days	Time Tested	COMPRESSIVE STRENGTH Maximum Load lbf	COMPRESSIVE STRENGTH Maximum Load lbf per sq.in.	Conformance Indicated?	Type of Fracture & Defects Noted	Tested By
0430702-1	**07-09-14**	**7**	**15:00**	**37378**	**2970**		**TYPE 2**	**FH**
0430702-1	**07-09-14**	**7**	**15:05**	**37590**	**2990**		**TYPE 5**	**FH**
0430702-1	**07-30-14**	**28**	**14:33**	**52081**	**4140**		**TYPE 1**	**BM**
0430702-1	**07-30-14**	**28**	**14:40**	**51883**	**4130**		**TYPE 1**	**BM**
0460702-1		**HOLD**						
	AVERAGE	**7**			**2980**			
	AVERAGE	**28**			**4140**	**YES**		

Comments:

Distribution : **MOLTZ CONSTRUCTORS, INC. (1)**

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SAMPLING / TESTING OF PORTLAND CEMENT CONCRETE

Client **MOLTZ CONSTRUCTORS, INC.**
PO BOX 1030
CODY, WY 82414

Date of Report **08-29-14**
Job No. **3154JH043**
Event/Invoice No. **31540118-04** Lab No. **0430703-1**
Authorized By **GARY BORING** Date **06-27-14**
Sampled By **D. SENJEM** Date **07-03-14**
Submitted By **D. SENJEM** Date **07-08-14**

Client	**MOLTZ CONSTRUCTORS, INC.**
Project	**CONTINENTAL DAMREHABILITATION PROJECT**
Location	**SANTA MARIA IRRIGATION DISTRICT**
Source of Sample	**SIDE CHANNEL WALL IWL-1, STA:-1+75 LT**
Architect/Engineer	**EDWIN TOMS, P.E.**
Contractor	**MOLTZ CONSTRUCTORS, INC.**
Supplier	**SOUTHWEST READY MIX**

Truck/Ticket No. **308/ 4784 & 4785** Mix Identification **332-F/CD** Maximum Size Aggregate **3/4** inches
Batch Size **5.0** cubic yards Required Strength **4000** psi @ **28** days Water Added Before Sampling **0** gallons
Time In Mixer **1** hours **10** minutes Ambient Air Temperature **50** °F Time Sampled **0810**

FRESHLY MIXED CONCRETE SAMPLED IN ACCORDANCE WITH **ASTM C172**
Deviations: **SAMPLED MIDDLE THIRD OF LOAD BY SINGLE DISCHARGE**

FRESHLY MIXED CONCRETE TESTED IN ACCORDANCE WITH DESIGNATED SPECIFICATIONS
Unit Weight; **ASTM C138** **144.0** lbf/cu.ft. Temperature: **ASTM C1064** **67** °F
Air Content; **ASTM C231** **4.4** % Slump; **ASTM C143** **2.75** inches
Deviations: **SAMPLE IDENTIFICATION AND FRESH CONCRETE TEST DATA SUBMITTED BY WTI**

CYLINDRICAL CONCRETE SPECIMENS MOLDED & CURED IN THE FIELD IN ACCORDANCE WITH **ASTM C31**
No. of Specimens Molded **5** Diameter/Length **4.00** in. x **8** in. Cross Sectional Area **12.57** sq. in.
Deviations: **SPECIMEN ENVIRONMENT NOT MONITERED BY WTI DURING INITIAL CURE**
SPECIMEN REMAINED UNSTRIPEED MORE THAN 48 HOURS

CYLINDRICAL CONCRETE SPECIMENS CURED & TESTED IN THE LABORATORY IN ACCORDANCE WITH **ASTM C31 & C39**

Specimen Marking If Any	Date Tested	Age In Days	Time Tested	COMPRESSIVE STRENGTH Maximum Load lbf	lbf per sq.in.	Conformance Indicated?	Type of Fracture & Defects Noted	Tested By
0430703-1	**07-10-14**	**7**	**10:49**	**31893**	**2540**		**TYPE 1**	**FW**
0430703-1	**07-10-14**	**7**	**10:52**	**32755**	**2610**		**TYPE 4**	**FW**
0430703-1	**07-31-14**	**28**	**16:08**	**45578**	**3630**		**TYPE 5**	**MW**
0430703-1	**07-31-14**	**28**	**16:11**	**44108**	**3510**		**TYPE 5**	**MW**
0430703-1	**08-28-14**	**56**	**09:51**	**52463**	**4170**	**YES**	**TYPE 3**	**JAH**
	AVERAGE	**7**			**2580**			
	AVERAGE	**28**			**3570**	**NO**		

Comments:

Distribution : **MOLTZ CONSTRUCTORS, INC. (1)**

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REVIEWED BY **B. MCCALL**
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SAMPLING / TESTING OF PORTLAND CEMENT CONCRETE

Client **MOLTZ CONSTRUCTORS, INC.**
PO BOX 1030
CODY, WY 82414

Date of Report **09-02-14**
Job No. **3154JH043**
Event/Invoice No. **31540118-05** Lab No. **0430708-1**
Authorized By **GARY BORING** Date **07-03-14**
Sampled By **D. SENJEM** Date **07-08-14**
Submitted By **D. SEMJEM** Date **07-11-14**

Client **MOLTZ CONSTRUCTORS, INC.**
Project **CONTINENTAL DAMREHABILITATION PROJECT**
Location **SANTA MARIA IRRIGATION DISTRICT**
Source of Sample **FLOOR SLAB #8, CHANNEL FLOOR, STA:0+42 @ CL**
Architect/Engineer **EDWIN TOMS, P.E.**
Contractor **MOLTZ CONSTRUCTORS, INC.**
Supplier **SOUTHWEST READY MIX**
Truck/Ticket No. **308/4796 & 4797** Mix Identification **332-F / CD** Maximum Size Aggregate **3/4** inches
Batch Size **5.5** cubic yards Required Strength **4000** psi @ **28** days Water Added Before Sampling **0** gallons
Time In Mixer **1** hours **54** minutes Ambient Air Temperature **48** °F Time Sampled **0835**

FRESHLY MIXED CONCRETE SAMPLED IN ACCORDANCE WITH **ASTM C172**
Deviations: **SAMPLED MIDDLE THIRD OF LOAD BY SINGLE DISHARGE**

FRESHLY MIXED CONCRETE TESTED IN ACCORDANCE WITH DESIGNATED SPECIFICATIONS
Unit Weight; **ASTM C138** **145.2** lbf/cu.ft. Temperature: **ASTM C1064** **67** °F
Air Content; **ASTM C231** **4.6** % Slump; **ASTM C143** **2 3/4** inches
Deviations: **SAMPLE IDENTIFICATION AND FRESH CONCRETE TEST DATA SUBMITTED BY WTI**

CYLINDRICAL CONCRETE SPECIMENS MOLDED & CURED IN THE FIELD IN ACCORDANCE WITH **ASTM C31**
No. of Specimens Molded **5** Diameter/Length **4.00** in.x **8** in. Cross Sectional Area **12.57** sq. in.
Deviations: **SPECIMEN ENVIRONMENT NOT MONITERED BY WTI DURING INITIAL CURE**

CYLINDRICAL CONCRETE SPECIMENS CURED & TESTED IN THE LABORATORY IN ACCORDANCE WITH **ASTM C31 & C39**

Specimen Marking If Any	Date Tested	Age In Days	Time Tested	COMPRESSIVE STRENGTH Maximum Load lbf	COMPRESSIVE STRENGTH Maximum Load lbf per sq.in.	Conformance Indicated?	Type of Fracture & Defects Noted	Tested By
0430708-1	07-15-14	7	14:10	32996	2630		TYPE 5	MW
0430708-1	07-15-14	7					LAB ACCIDENT	MW
0430708-1	08-05-14	28	15:50	47670	3790		TYPE 3	MW
0430708-1	08-05-14	28	15:53	45097	3590		TYPE 5	MW
0430708-1	09-02-14	56	11:30	52703	4190	YES	TYPE 3	JAH
	AVERAGE	28			3690	NO		

Comments:

Distribution : **MOLTZ CONSTRUCTORS, INC. (1)**

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278 Sawyer Drive, No. 2
Durango, CO 81303
(970) 375-9033

SAMPLING / TESTING OF PORTLAND CEMENT CONCRETE

Client **MOLTZ CONSTRUCTORS, INC.**
PO BOX 1030
CODY, WY 82414

Date of Report **08-12-14**
Job No. **3154JH043**
Event/Invoice No. **31540118-06** Lab No. **0430711-1**
Authorized By **GARY BORING** Date **07-09-14**
Sampled By **D. SENJEM** Date **07-11-14**
Submitted By **D. SENJEM** Date **07-11-14**

Client **MOLTZ CONSTRUCTORS, INC.**
Project **CONTINENTAL DAMREHABILITATION PROJECT**
Location **SANTA MARIA IRRIGATION DISTRICT**
Source of Sample **CHANNEL FLOOR, SLAB #3 STATION: -1+40 3' RT OF CL**
Architect/Engineer **EDWIN TOMS, P.E.**
Contractor **MOLTZ CONSTRUCTORS, INC.**
Supplier **SOUTHWEST READY MIX**
Truck/Ticket No. **308/4814+4815** Mix Identification **332-F/CD** Maximum Size Aggregate **3/4** inches
Batch Size **7.0** cubic yards Required Strength **4000** psi @ **28** days Water Added Before Sampling **5** gallons
Time In Mixer **1** hours **47** minutes Ambient Air Temperature **48** °F Time Sampled **0850**

FRESHLY MIXED CONCRETE SAMPLED IN ACCORDANCE WITH **ASTM C172**
Deviations: **SAMPLED MIDDLE THIRD OF LOAD BY SINGLE DISCHARGE**

FRESHLY MIXED CONCRETE TESTED IN ACCORDANCE WITH DESIGNATED SPECIFICATIONS
Unit Weight; **ASTM C138** **146.8** lbf/cu.ft. Temperature: **ASTM C1064** **70** °F
Air Content; **ASTM C231** **4.4** % Slump; **ASTM C143** **2.1/4** inches
Deviations: **ALL SAMPLE IDENTIFICATION AND FRESH CONCRETE TEST DATA WERE SUBMITTED BY WTI**

CYLINDRICAL CONCRETE SPECIMENS MOLDED & CURED IN THE FIELD IN ACCORDANCE WITH **ASTM C31**
No. of Specimens Molded **5** Diameter/Length **4.00** in.x **8** in. Cross Sectional Area **12.57** sq. in.
Deviations: **SPECIMEN ENVIRONMENT WAS NOT MONITERED BY WTI DURING INITIAL CURE**

CYLINDRICAL CONCRETE SPECIMENS CURED & TESTED IN THE LABORATORY IN ACCORDANCE WITH **ASTM C31 & C39**

Specimen Marking If Any	Date Tested	Age In Days	Time Tested	COMPRESSIVE STRENGTH Maximum Load lbf	lbf per sq.in.	Conformance Indicated?	Type of Fracture & Defects Noted	Tested By
0430711-1	07-18-14	7	16:51	38156	3040		TYPE 5	DS
0430711-1	07-18-14	7	16:56	36403	2900		TYPE 2	DS
0430711-1	08-08-14	28	13:59	50738	4040		TYPE 1	GT
043071-1	08-08-14	28	14:02	52161	4150		TYPE 2	GT
043071-1		HOLD						
	AVERAGE	7			2970			
	AVERAGE	28			4100	YES		

Comments:

Distribution : **MOLTZ CONSTRUCTORS, INC. (1)**

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7/11/2014

Continental Dam Concrete Compressive Strengths - Required Strength 3000

Specimen Marking	Sample Date	Days 3	3	Days 7	7	Days 8	8	Days 10	10	Days 28	28
0430531-1	5/31/14			1,890						3,010	3,030
0430531-2	5/31/14			1,820						2,930	2,920
				1,855						2,970	5,950

7/11/2014

Continental Dam Concrete Compressive Strengths - Required Strength 4000

Specimen Marking	Sample Date	Days 3	3	Days 7	7	Days 8	8	Days 10	10	Days 28	28
0430616-1	6/16/14			3,200							
0430618-1	6/18/14			2,440	2,350						
0430620-1	6/20/14			3,260	3,220						
0430623-1	6/23/14			2,680	2,640						
04306241-1	6/24/14			2,810	2,790						
0430625-1	6/25/14			2,870	2,820						
0430626-1	6/26/14			2,760	2,650						
0430627-1	6/27/14			3,070	3,200						
0310701-1	6/30/14			3,160	3,130						
0430701-1	7/1/14			2,830	2,830						
0430702-1	7/2/14			2,970	2,990						
0430703-1	7/3/14			2,540	2,610						

SAMPLING / TESTING OF PORTLAND CEMENT CONCRETE

Client MOLTZ CONSTRUCTORS, INC.
PO BOX 1030
CODY, WY 82414

Date of Report 10-09-14
Job No. 3154JH043
Event/Invoice No. 31540118-08 Lab No. 0430714-1
Authorized By GARY BORING Date 07-11-14
Sampled By D. SENJEM Date 07-14-14
Submitted By D. SENJEM Date 07-15-14

Client MOLTZ CONSTRUCTORS, INC.
Project CONTINENTAL DAMREHABILITATION PROJECT
Location SANTA MARIA IRRIGATION DISTRICT
Source of Sample CHANNEL FLOOR, SLAB #7, STA: -0+70 @ CL
Architect/Engineer EDWIN TOMS, P.E.
Contractor MOLTZ CONSTRUCTORS, INC.
Supplier SOUTHWEST READY MIX
Truck/Ticket No. 292/4820,4821,4822 Mix Identification 332-F/CD Maximum Size Aggregate 3/4 inches
Batch Size 10.5 cubic yards Required Strength 4000 psi @ 28 days Water Added Before Sampling 0 gallons
Time In Mixer 2 hours 4 minutes Ambient Air Temperature 55 °F Time Sampled 0907

FRESHLY MIXED CONCRETE SAMPLED IN ACCORDANCE WITH ASTM C172
Deviations: SAMPLED MIDDLE THIRD OF LOAD BY SINGLE DISCHARGE

FRESHLY MIXED CONCRETE TESTED IN ACCORDANCE WITH DESIGNATED SPECIFICATIONS
Unit Weight; lbf/cu.ft. Temperature: ASTM C1064 70 °F
Air Content; ASTM C231 6.0 % Slump; ASTM C143 2 1/4 inches
Deviations: ALL SAMPLE IDENTIFICATION AND FRESH CONCRETE TEST DATA WERE SUBMITTED BY WTI

CYLINDRICAL CONCRETE SPECIMENS MOLDED & CURED IN THE FIELD IN ACCORDANCE WITH ASTM C31
No. of Specimens Molded 6 Diameter/Length 4.00 in.x 8 in. Cross Sectional Area 12.57 sq. in.
Deviations: SPECIMEN ENVIRONMENT WAS NOT MONITERED BY WTI DURINING INITIAL CURE

CYLINDRICAL CONCRETE SPECIMENS CURED & TESTED IN THE LABORATORY IN ACCORDANCE WITH ASTM C31 & C39

Specimen Marking If Any	Date Tested	Age In Days	Time Tested	COMPRESSIVE STRENGTH Maximum Load lbf	lbf per sq.in.	Conformance Indicated?	Type of Fracture & Defects Noted	Tested By
0430714-1	07-18-14	4	14:12	29829	2370		TYPE 5	DS
0430714-1	07-21-14	7	15:44	35880	2850		TYPE 5	DS
0430714-1	07-21-14	7	15:48	34579	2750		TYPE 5	DS
0430714-1	08-11-14	28	21:17	45097	3590		TYPE 3	FH
0430714-1	08-11-14	28	21:21	44348	3530		TYPE 2	FH
0430714-1	10-06-14	84	09:57	54272	4320	YES	TYPE 5	JAH
	AVERAGE	7			2800			
	AVERAGE	28			3560	NO		

Comments:

Distribution : MOLTZ CONSTRUCTORS, INC. (1)

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SAMPLING / TESTING OF PORTLAND CEMENT CONCRETE

Client **MOLTZ CONSTRUCTORS, INC.**
PO BOX 1030
CODY, WY 82414

Date of Report **10-09-14**
Job No. **3154JH043**
Event/Invoice No. **31540118-07** Lab No. **0430715-1**
Authorized By **GARY BORING** Date **07-11-14**
Sampled By **D. SENJEM** Date **07-15-14**
Submitted By **D. SENJEM** Date **07-16-14**

Client **MOLTZ CONSTRUCTORS, INC.**
Project **CONTINENTAL DAMREHABILITATION PROJECT**
Location **SANTA MARIA IRRIGATION DISTRICT**
Source of Sample **CHANNEL FLOOR SLAB #9, STA: -0+17, 4' LT.**
Architect/Engineer **EDWIN TOMS, P.E.**
Contractor **MOLTZ CONSTRUCTORS, INC.**
Supplier **SOUTHWEST READY MIX**
Truck/Ticket No. **376/4840,4841,4842** Mix Identification **332-F/CD** Maximum Size Aggregate **3/4** inches
Batch Size **7.5** cubic yards Required Strength **4000** psi @ **28** days Water Added Before Sampling **10** gallons
Time In Mixer **2** hours **5** minutes Ambient Air Temperature **56** °F Time Sampled **0854**

FRESHLY MIXED CONCRETE SAMPLED IN ACCORDANCE WITH **ASTM C172**
Deviations: **SAMPLED MIDDLE THIRD OF LOAD BY SINGLE DISCHARGE**

FRESHLY MIXED CONCRETE TESTED IN ACCORDANCE WITH DESIGNATED SPECIFICATIONS
Unit Weight; **ASTM C138** **145.4** lbf/cu.ft. Temperature: **ASTM C1064** **72** °F
Air Content; **ASTM C231** **4.8** % Slump; **ASTM C143** **2 3/4** Inches
Deviations: **ALL SAMPLE IDENTIFICATION AND FRESH CONCRETE TEST DATA WERE SUBMITTED BY WTI**

CYLINDRICAL CONCRETE SPECIMENS MOLDED & CURED IN THE FIELD IN ACCORDANCE WITH **ASTM C31**
No. of Specimens Molded **5** Diameter/Length **4.00** in.x **8** in. Cross Sectional Area **12.57** sq. In.
Deviations: **SPECIMEN ENVIRONMENT WAS NOT MONITERED BY WTI DURING INITIAL CURE**

CYLINDRICAL CONCRETE SPECIMENS CURED & TESTED IN THE LABORATORY IN ACCORDANCE WITH **ASTM C31 & C39**

Specimen Marking If Any	Date Tested	Age In Days	Time Tested	COMPRESSIVE STRENGTH Maximum Load lbf	lbf per sq.in.	Conformance Indicated?	Type of Fracture & Defects Noted	Tested By
0430715-1	07-22-14	7	09:05	36770	2930		TYPE 5	GT
0430715-1	07-22-14	7	09:09	38877	3090		TYPE 2	GT
0430715-1	08-12-14	28	09:28	47741	3800		TYPE 2	FH
0430715-1	08-12-14	28	09:33	50681	4030		TYPE 2	FH
0430715-1	10-07-14	84	08:54	61440	4890	YES	TYPE 5	JAH
	AVERAGE	7			3010			
	AVERAGE	28			3920	NO		

Comments:

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SAMPLING / TESTING OF PORTLAND CEMENT CONCRETE

Client MOLTZ CONSTRUCTORS, INC.
PO BOX 1030
CODY, WY 82414

Date of Report 10-09-14
Job No. 3154JH043
Event/Invoice No. 31540118-09 Lab No. 0430716-1
Authorized By GARY BORING Date 07-11-14
Sampled By D. SENJEM Date 07-16-14
Submitted By D. SENJEM Date 07-21-12

Client MOLTZ CONSTRUCTORS, INC.
Project CONTINENTAL DAMREHABILITATION PROJECT
Location SANTA MARIA IRRIGATION DISTRICT
Source of Sample CHANNEL FLOOR, SLAB #4, STATION: -1+24 @ CL
Architect/Engineer EDWIN TOMS, P.E.
Contractor MOLTZ CONSTRUCTORS, INC.
Supplier SOUTHWEST READY MIX
Truck/Ticket No. 308/4868+4869 Mix Identification 332- F/CD Maximum Size Aggregate 3/4 inches
Batch Size 7.0 cubic yards Required Strength 4000 psi @ 28 days Water Added Before Sampling 20 gallons
Time In Mixer 1 hours 38 minutes Ambient Air Temperature 46 °F Time Sampled 0838

FRESHLY MIXED CONCRETE SAMPLED IN ACCORDANCE WITH ASTM C172

Deviations: SAMPLED MIDDLE THIRD OF LOAD BY SINGLE DISCHARGE

FRESHLY MIXED CONCRETE TESTED IN ACCORDANCE WITH DESIGNATED SPECIFICATIONS

Unit Weight; ASTM C138 143.3 lbf/cu.ft. Temperature: ASTM C1064 67 °F
Air Content; ASTM C231 5.5 % Slump; ASTM C143 4 inches
Deviations: ALL SAMPLE IDENTIFICATION AND FRESH CONCRETE TEST DATA WERE SUBMITTED BY WTI

CYLINDRICAL CONCRETE SPECIMENS MOLDED & CURED IN THE FIELD IN ACCORDANCE WITH ASTM C31

No. of Specimens Molded 5 Diameter/Length 4.00 in.x 8 in. Cross Sectional Area 12.57 sq. in.
Deviations: SPECIMEN ENVIRONMENT WAS NOT MONITERD BY WTI DURING INITIAL CURE

CYLINDRICAL CONCRETE SPECIMENS CURED & TESTED IN THE LABORATORY IN ACCORDANCE WITH ASTM C31 & C39

Specimen Marking If Any	Date Tested	Age In Days	Time Tested	COMPRESSIVE STRENGTH Maximum Load lbf	COMPRESSIVE STRENGTH Maximum Load lbf per sq.in.	Conformance Indicated?	Type of Fracture & Defects Noted	Tested By
0430716-1	07-23-14	7	14:38	28924	2300		TYPE 2	GT
0430716-1	07-23-14	7	14:48	31596	2510		TYPE 2	GT
0430716-1	08-13-14	28	08:58	42581	3390		TYPE 2	BAM
0430716-1	08-13-14	28	09:05	42580	3390		TYPE 2	BAM
0430716-1	10-08-14	84	09:03	54852	4360	YES	TYPE 2	JAH
	AVERAGE	7			2410			
	AVERAGE	28			3390	NO		

Comments:

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SAMPLING / TESTING OF PORTLAND CEMENT CONCRETE

Client **MOLTZ CONSTRUCTORS, INC.**
PO BOX 1030
CODY, WY 82414

Date of Report **11-11-14**
Job No. **3154JH043**
Event/Invoice No. **31540118-10** Lab No. **0430721-1**
Authorized By **GARY BORING** Date **07-16-14**
Sampled By **D. SENJEM** Date **07-21-14**
Submitted By **D. SENJEM** Date **07-23-14**

Client	**MOLTZ CONSTRUCTORS, INC.**
Project	**CONTINENTAL DAM REHABILITATION PROJECT**
Location	**SANTA MARIA IRRIGATION DISTRICT**
Source of Sample	**SIDE CHANNEL WALL #9, STA: 0+25 LEFT**
Architect/Engineer	**EDWIN TOMS, P.E.**
Contractor	**MOLTZ CONSTRUCTORS, INC.**
Supplier	**SOUTHWEST READY MIX**

Truck/Ticket No. **292/4892,4893,4894** Mix Identification **332-F/CD** Maximum Size Aggregate **3/4** inches
Batch Size **7.8** cubic yards Required Strength **4000** psi @ **28** days Water Added Before Sampling **20** gallons
Time In Mixer **1** hours **40** minutes Ambient Air Temperature **51** °F Time Sampled **0852**

FRESHLY MIXED CONCRETE SAMPLED IN ACCORDANCE WITH **ASTM C172**

Deviations: **SAMPLED MIDDLE THIRD OF LOAD BY SINGLE DISCHARGE.**

FRESHLY MIXED CONCRETE TESTED IN ACCORDANCE WITH DESIGNATED SPECIFICATIONS

Unit Weight; **ASTM C138** **139.1** lbf/cu.ft. Temperature: **ASTM C1064** **68** °F
Air Content; **ASTM C231** **4.6** % Slump; **ASTM C143** **4 3/4** inches
Deviations: **ALL SAMPLE IDENTIFICATION AND FRESH CONCRETE TEST DATA WERE SUBMITTED BY WTI.**

CYLINDRICAL CONCRETE SPECIMENS MOLDED & CURED IN THE FIELD IN ACCORDANCE WITH **ASTM C31**

No. of Specimens Molded **5** Diameter/Length **4.00** in. x **8** in. Cross Sectional Area **12.57** sq. in.
Deviations: **SPECIMEN ENVIRONMENT WAS NOT MONITORED BY WT DURING INITIAL CURE.**

CYLINDRICAL CONCRETE SPECIMENS CURED & TESTED IN THE LABORATORY IN ACCORDANCE WITH **ASTM C31 & C39**

Specimen Marking If Any	Date Tested	Age In Days	Time Tested	COMPRESSIVE STRENGTH Maximum Load lbf	lbf per sq.in.	Conformance Indicated?	Type of Fracture & Defects Noted	Tested By
0430721-1	07-28-14	7	17:34	25305	2010		TYPE 3	MW
0430721-1	07-28-14	7	17:37	23354	1860		TYPE 5	MW
0430721-1	08-18-14	28	09:09	33731	2680		TYPE 2	JAH
0430721-1	08-18-14	28	09:20	35569	2830		TYPE 5	JAH
0430721-1	11-10-14	112	09:48	46567	3710	NO	TYPE 4	MW
	AVERAGE	7			1940			
	AVERAGE	28			2760	NO		

Comments:

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REVIEWED BY **F. HAMPTON**
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7/22/2014

Continental Dam Concrete Compressive Strengths - Required Strength 4000

Specimen Marking	Sample Date	Days 3	3	Days 7	7	Days 8	8	Days 10	10	Days 28	28	Requiremt Met?
0430616-1	6/16/14			3,200						4,190	4,520	Yes
0430618-1	6/18/14			2,440	2,350					3,340	3,480	No
0430620-1	6/20/14			3,260	3,220					4,360	4,400	Yes
0430623-1	6/23/14			2,680	2,640							
04306241-1	6/24/14			2,810	2,790							
0430625-1	6/25/14			2,870	2,820							
0430626-1	6/26/14			2,760	2,650							
0430627-1	6/27/14			3,070	3,200							
0310701-1	6/30/14			3,160	3,130							
0430701-1	7/1/14			2,830	2,830							
0430702-1	7/2/14			2,970	2,990							
0430703-1	7/3/14			2,540	2,610							
0430708-1	7/8/14			2,630	N/A							
0430711-1	7/18/14			3,040	2,900							
				2,876	2,844					3,963	4,133	

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SAMPLING / TESTING OF PORTLAND CEMENT CONCRETE

Client **MOLTZ CONSTRUCTORS, INC.**
PO BOX 1030
CODY, WY 82414

Date of Report **11-17-14**
Job No. **3154JH043**
Event/Invoice No. **31540118-12** Lab No. **0430723-1**
Authorized By **GARY BORING** Date **07-16-14**
Sampled By **D. SENJEM** Date **07-23-14**
Submitted By **D. SENJEM** Date **07-25-14**

Client	**MOLTZ CONSTRUCTORS, INC.**
Project	**CONTINENTAL DAM REHABILITATION PROJECT**
Location	**SANTA MARIA IRRIGATION DISTRICT**
Source of Sample	**SIDE CHANNEL WALL, IWR-9, STA: 0+28, RT**
Architect/Engineer	**EDWIN TOMS, P.E.**
Contractor	**MOLTZ CONSTRUCTORS, INC.**
Supplier	**SOUTHWEST READY MIX**

Truck/Ticket No. **292/4914, 4915, 4916** Mix Identification **332-F/CD** Maximum Size Aggregate **3/4** inches
Batch Size **13.1** cubic yards Required Strength **4000** psi @ **28** days Water Added Before Sampling **25** gallons
Time In Mixer **1** hours **31** minutes Ambient Air Temperature **55** °F Time Sampled **0832**

FRESHLY MIXED CONCRETE SAMPLED IN ACCORDANCE WITH **ASTM C172**

Deviations: **SAMPLED MIDDLE THIRD THIRD OF LOAD BY SINGLE DISCHARGE**

FRESHLY MIXED CONCRETE TESTED IN ACCORDANCE WITH DESIGNATED SPECIFICATIONS

Unit Weight; **ASTM C138** **139.1** lbf/cu.ft. Temperature: **ASTM C1064** **70** °F
Air Content; **ASTM C231** **6.0** % Slump; **ASTM C143** **5 3/4** inches
Deviations: **ALL SAMPLE IDENTIFICATION AND FRESH CONCRETE TEST DATA WERE SUBMITTED BY WTI**

CYLINDRICAL CONCRETE SPECIMENS MOLDED & CURED IN THE FIELD IN ACCORDANCE WITH **ASTM C31**

No. of Specimens Molded **5** Diameter/Length **4.00** in.x **8** in. Cross Sectional Area **12.57** sq. in.
Deviations: **SPECIMEN ENVIRONMENT WAS NOT MONITERED BY WTI DURING INITIAL CURE**

CYLINDRICAL CONCRETE SPECIMENS CURED & TESTED IN THE LABORATORY IN ACCORDANCE WITH **ASTM C31 & C39**

Specimen Marking If Any	Date Tested	Age In Days	Time Tested	COMPRESSIVE STRENGTH Maximum Load lbf	lbf per sq.in.	Conformance Indicated?	Type of Fracture & Defects Noted	Tested By
0430723-1	**07-30-14**	**7**	**14:44**	**27185**	**2160**		**TYPE 1**	**BM**
0430723-1	**07-30-14**	**7**	**14:48**	**26054**	**2070**		**TYPE 1**	**BM**
0430723-1	**08-20-14**	**28**	**16:35**	**37407**	**2980**		**TYPE 3**	**GT**
0430723-1	**08-20-14**	**28**	**16:38**	**35597**	**2830**		**TYPE 3**	**GT**
0430723-1	**11-12-14**	**112**	**10:17**	**49451**	**3930**	**NO**	**TYPE 5**	**DS**
	AVERAGE	**7**			**2120**			
	AVERAGE	**28**			**2910**	**NO**		

Comments:

Distribution : **MOLTZ CONSTRUCTORS, INC. (1)**

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REVIEWED BY **F. HAMPTON**
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Durango, CO 81303
(970) 375-9033

SAMPLING / TESTING OF PORTLAND CEMENT CONCRETE

Client **MOLTZ CONSTRUCTORS, INC.**
PO BOX 1030
CODY, WY 82414

Date of Report **10-27-14**
Job No. **3154JH043**
Event/Invoice No. **31540118-11** Lab No. **0430725-1**
Authorized By **GARY BORING** Date **07-24-14**
Sampled By **D. SENJEM** Date **07-25-14**
Submitted By **D. SENJEM** Date **07-29-14**

Client **MOLTZ CONSTRUCTORS, INC.**
Project **CONTINENTAL DAM REHABILITATION PROJECT**
Location **SANTA MARIA IRRIGATION DISTRICT**
Source of Sample **SIDE CHANNEL WALL,IWL-10, STA:-0+15 LT**
Architect/Engineer **EDWIN TOMS, P.E.**
Contractor **MOLTZ CONSTRUCTORS, INC.**
Supplier **SOUTHWEST READY MIX**

Truck/Ticket No. **292/4935, 4936** Mix Identification **332-F/CD** Maximum Size Aggregate **3/4** inches
Batch Size **7.8** cubic yards Required Strength **4000** psi @ **28** days Water Added Before Sampling **15** gallons
Time In Mixer **1** hours **31** minutes Ambient Air Temperature **66** °F Time Sampled **1137**

FRESHLY MIXED CONCRETE SAMPLED IN ACCORDANCE WITH **ASTM C172**
Deviations: **SAMPLED MIDDLE THIRD OF LOAD BY SINGLE DISCHARGE**

FRESHLY MIXED CONCRETE TESTED IN ACCORDANCE WITH DESIGNATED SPECIFICATIONS
Unit Weight; **ASTM C138** **142.5** lbf/cu.ft. Temperature: **ASTM C1064** **75** °F
Air Content; **ASTM C231** **4.9** % Slump; **ASTM C143** **4 1/4** inches
Deviations: **ALL SAMPLE IDENTIFICATION AND FRESH CONCRETE TEST DATA WERE SUBMITTED BY WTI**

CYLINDRICAL CONCRETE SPECIMENS MOLDED & CURED IN THE FIELD IN ACCORDANCE WITH **ASTM C31**
No. of Specimens Molded **5** Diameter/Length **4.00** in.x **8** in. Cross Sectional Area **12.57** sq. in.
Deviations: **SPECIMEN ENVIRONMENT WAS NOT MONITERED BY WTI DURING INITIAL CURE**

CYLINDRICAL CONCRETE SPECIMENS CURED & TESTED IN THE LABORATORY IN ACCORDANCE WITH **ASTM C31 & C39**

Specimen Marking If Any	Date Tested	Age In Days	Time Tested	COMPRESSIVE STRENGTH Maximum Load lbf	lbf per sq.in.	Conformance Indicated?	Type of Fracture & Defects Noted	Tested By
0430725-1	08-01-14	7	19:44	31639	2520		TYPE 5	DS
0430725-1	08-01-14	7	19:48	30112	2400		TYPE 3	DS
0430725-1	08-22-14	28	12:10	42538	3380		TYPE 2	JAH
0430725-1	08-22-14	28	12:14	40658	3240		TYPE 5	JAH
0430725-1	10-17-14	84	09:31	56251	4480	YES	TYPE 3	JAH
	AVERAGE	7			2460			
	AVERAGE	28			3310	NO		

Comments:

Distribution : **MOLTZ CONSTRUCTORS, INC. (1)**

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7/28/2014

Continental Dam Concrete Compressive Strengths - Required Strength 4000

Specimen Marking	Sample Date	Days 4	4	Days 7	7	Days 8	8	Days 10	10	Days 28	28	
0430616-1	6/16/14			3,200						4,190	4,520	
0430618-1	6/18/14			2,440	2,350					3,340	3,480	
0430620-1	6/20/14			3,260	3,220					4,360	4,400	
0430623-1	6/23/14			2,680	2,640					3,360	3,420	
0430624-1	6/24/14			2,810	2,790					4,030	3,640	
0430625-1	6/25/14			2,870	2,820					3,860	3,790	
0430626-1	6/26/14			2,760	2,650					2,670	3,690	
0430627-1	6/27/14			3,070	3,200							
0310701-1	6/30/14			3,160	3,130							
0430701-1	7/1/14			2,830	2,830							
0430702-1	7/2/14			2,970	2,990							
0430703-1	7/3/14			2,540	2,610							
0430708-1	7/8/14			2,630	N/A							
0430711-1	*7/11/14*			3,040	2,900							Date correction
0430714-1	7/14/14	2,370		2,850	2,750							
0430715-1	7/15/14			2,930	3,090							
0430716-1	7/16/14			2,300	2,510							
				2,844	2,832					3,687	3,849	

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SAMPLING / TESTING OF PORTLAND CEMENT CONCRETE

Client **MOLTZ CONSTRUCTORS, INC.**
PO BOX 1030
CODY, WY 82414

Date of Report **10-27-14**
Job No. **3154JH043**
Event/Invoice No. **31540118-15** Lab No. **0430729-1**
Authorized By **GARY BORING** Date **07-25-14**
Sampled By **D. SENJEM** Date **07-29-14**
Submitted By **D. SENJEM** Date **07-30-14**

Client **MOLTZ CONSTRUCTORS, INC.**
Project **CONTINENTAL DAM REHABILITATION PROJECT**
Location **SANTA MARIA IRRIGATION DISTRICT**
Source of Sample **SPILLWAY CHANNEL BACKFILL, STA: 0+43, CL**
Architect/Engineer **EDWIN TOMS, P.E.**
Contractor **MOLTZ CONSTRUCTORS, INC.**
Supplier **SOUTHWEST READY MIX**
Truck/Ticket No. **292/4946,4947,4948** Mix Identification **332-F/CD** Maximum Size Aggregate **3/4** inches
Batch Size **6.8** cubic yards Required Strength **4000** psi @ **28** days Water Added Before Sampling **15** gallons
Time In Mixer **1** hours **58** minutes Ambient Air Temperature **51** °F Time Sampled **0916**

FRESHLY MIXED CONCRETE SAMPLED IN ACCORDANCE WITH **ASTM C172**
Deviations: **SAMPLED MIDDLE THIRD OF LOAD BY SINGLE DISCHARGE**

FRESHLY MIXED CONCRETE TESTED IN ACCORDANCE WITH DESIGNATED SPECIFICATIONS
Unit Weight; **ASTM C138** **137.9** lbf/cu.ft. Temperature: **ASTM C1064** **68** °F
Air Content; **ASTM C231** **7.8** % Slump; **ASTM C143** **4** inches
Deviations: **ALL SAMPLE IDENTIFICATION AND FRESH CONCRETE TEST DATA WERE SUBMITTED BY WTI**

CYLINDRICAL CONCRETE SPECIMENS MOLDED & CURED IN THE FIELD IN ACCORDANCE WITH **ASTM C31**
No. of Specimens Molded **6** Diameter/Length **4.00** in. x **8** in. Cross Sectional Area **12.57** sq. in.
Deviations: **SPECIMEN ENVIRONMENT WAS NOT MONITERED BY WTI DURING INITIAL CURE**

CYLINDRICAL CONCRETE SPECIMENS CURED & TESTED IN THE LABORATORY IN ACCORDANCE WITH **ASTM C31 & C39**

Specimen Marking If Any	Date Tested	Age In Days	Time Tested	COMPRESSIVE STRENGTH Maximum Load lbf	lbf per sq.in.	Conformance Indicated?	Type of Fracture & Defects Noted	Tested By
0430729-1	08-01-14	3	19:38	22845	1820		TYPE 2	DS
0430729-1	08-05-14	7	15:56	26747	2130		TYPE 5	MW
0430729-1	08-05-14	7	15:58	27595	2200		TYPE 5	MW
0430729-1	08-26-14	28	12:47	37407	2980		TYPE 4	GT
0430729-1	08-26-14	28	12:50	35597	2830		TYPE 4	GT
0430729-1	10-21-14	84	10:13	50992	4060	YES	TYPE 2	JAH
	AVERAGE	7			2170			
	AVERAGE	28			2910	NO		

Comments:

Distribution : **MOLTZ CONSTRUCTORS, INC. (1)**

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SAMPLING / TESTING OF PORTLAND CEMENT CONCRETE

Client **MOLTZ CONSTRUCTORS, INC.**
PO BOX 1030
CODY, WY 82414

Date of Report **10-27-14**
Job No. **3154JH043**
Event/Invoice No. **31540118-16** Lab No. **0430730-1**
Authorized By **GARY BORING** Date **07-29-14**
Sampled By **D. SENJEM** Date **07-30-14**
Submitted By **D. SENJEM** Date **08-01-14**

Client **MOLTZ CONSTRUCTORS, INC.**
Project **CONTINENTAL DAM REHABILITATION PROJECT**
Location **SANTA MARIA IRRIGATION DISTRICT**
Source of Sample **SIDE CHANNEL WALL, IWR-10, STA: 0+16, RT**
Architect/Engineer **EDWIN TOMS, P.E.**
Contractor **MOLTZ CONSTRUCTORS, INC.**
Supplier **SOUTHWEST READY MIX**

Truck/Ticket No. **292/4964,4965,4966** Mix Identification **332-F/CD** Maximum Size Aggregate **3/4** inches
Batch Size **7.8** cubic yards Required Strength **4000** psi @ **28** days Water Added Before Sampling **15** gallons
Time In Mixer **1** hours **29** minutes Ambient Air Temperature **52** °F Time Sampled **0850**

FRESHLY MIXED CONCRETE SAMPLED IN ACCORDANCE WITH **ASTM C172**

Deviations: **SAMPLED MIDDLE THIRD OF LOAD BY SINGLE DISCHARGE**

FRESHLY MIXED CONCRETE TESTED IN ACCORDANCE WITH DESIGNATED SPECIFICATIONS

Unit Weight; **ASTM C138** **140.1** lbf/cu.ft. Temperature: **ASTM C1064** **66** °F
Air Content; **ASTM C231** **6.2** % Slump; **ASTM C143** **5 1/4** inches
Deviations: **ALL SAMPLE IDENTIFICATION AND FRESH CONCRETE TEST DATA WERE SUBMITTED BY WTI**

CYLINDRICAL CONCRETE SPECIMENS MOLDED & CURED IN THE FIELD IN ACCORDANCE WITH **ASTM C31**

No. of Specimens Molded **5** Diameter/Length **4.00** in.x **8** in. Cross Sectional Area **12.57** sq. in.
Deviations: **SPECIMEN ENVIRONMNET WAS NOT MONITERED BY WTI DURING INITIAL CURE**

CYLINDRICAL CONCRETE SPECIMENS CURED & TESTED IN THE LABORATORY IN ACCORDANCE WITH **ASTM C31 & C39**

Specimen Marking If Any	Date Tested	Age In Days	Time Tested	COMPRESSIVE STRENGTH Maximum Load lbf	lbf per sq.in.	Conformance Indicated?	Type of Fracture & Defects Noted	Tested By
0430730-1	08-06-14	7	12:13	30988	2470		TYPE 5	GT
0430730-1	08-06-14	7	12:16	31596	2510		TYPE 1	GT
0430730-1	08-27-14	28	13:18	41690	3320		TYPE 3	MW
0430730-1	08-27-14	28	13:25	41351	3290		TYPE 5	MW
0430730-1	10-23-14	85	13:07	50526	4020	YES	TYPE 3	MW
	AVERAGE	7			2490			
	AVERAGE	28			3310	NO		

Comments:

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SAMPLING / TESTING OF PORTLAND CEMENT CONCRETE

Client **MOLTZ CONSTRUCTORS, INC.**
PO BOX 1030
CODY, WY 82414

Date of Report **10-27-14**
Job No. **3154JH043**
Event/Invoice No. **31540143-01** Lab No. **0430801-1**
Authorized By **GARY BORING** Date **07-30-14**
Sampled By **D. SENJEM** Date **08-01-14**
Submitted By **D. SENJEM** Date **08-02-14**

Client **MOLTZ CONSTRUCTORS, INC.**
Project **CONTINENTAL DAM REHABILITATION PROJECT**
Location **SANTA MARIA IRRIGATION DISTRICT**
Source of Sample **SLAB (BW-2), STA: 0+33, CL**
Architect/Engineer **EDWIN TOMS, P.E.**
Contractor **MOLTZ CONSTRUCTORS, INC.**
Supplier **SOUTHWEST READY MIX**
Truck/Ticket No. **292/4991/4992/4993** Mix Identification **332-F/CD** Maximum Size Aggregate **3/4** inches
Batch Size **10.0** cubic yards Required Strength **4000** psi @ **28** days Water Added Before Sampling **25** gallons
Time In Mixer **1** hours **36** minutes Ambient Air Temperature **49** °F Time Sampled **0847**

FRESHLY MIXED CONCRETE SAMPLED IN ACCORDANCE WITH **ASTM C172**
Deviations: **SAMPLED MIDDLE THIRD OF LOAD BY SINGLE DISCHARGE**

FRESHLY MIXED CONCRETE TESTED IN ACCORDANCE WITH DESIGNATED SPECIFICATIONS
Unit Weight; **ASTM C138** **141.1** lbf/cu.ft. Temperature: **ASTM C1064** **69** °F
Air Content; **ASTM C231** **5.3** % Slump; **ASTM C143** **5** inches
Deviations: **ALL SAMPLE IDENTIFICATION AND FRESH CONRETE TEST DATA WERE SUBMITTED BY WTI**

CYLINDRICAL CONCRETE SPECIMENS MOLDED & CURED IN THE FIELD IN ACCORDANCE WITH **ASTM C31**
No. of Specimens Molded **5** Diameter/Length **4.00** in.x **8** in. Cross Sectional Area **12.57** sq. in.
Deviations: **SPECIMEN ENVIRONMENT WAS NOT MONITERED BY WTI DURING INITIAL CURE**

CYLINDRICAL CONCRETE SPECIMENS CURED & TESTED IN THE LABORATORY IN ACCORDANCE WITH **ASTM C31 & C39**

Specimen Marking If Any	Date Tested	Age In Days	Time Tested	COMPRESSIVE STRENGTH Maximum Load lbf	lbf per sq.in.	Conformance Indicated?	Type of Fracture & Defects Noted	Tested By
0430808-1	08-08-14	7	14:06	31342	2490		TYPE 1	GT
0430801-1	08-08-14	7	14:09	31384	2500		TYPE 1	GT
0430801-1	08-29-14	28	09:51	44320	3530		TYPE 5	JAH
0430801-1	08-29-14	28	09:54	42058	3350		TYPE 5	JAH
0430801-1	10-24-14	84	13:35	47288	3760	NO	TYPE 2	JAH
	AVERAGE	7			2500			
	AVERAGE	28			3440	NO		

Comments:

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Continental Dam Concrete Compressive Strengths - Required Strength 4000

Specimen Marking	Sample Date	Days 4	4	Days 7	7	Days 8	8	Days 10	10	Days 28	28	
0430616-1	6/16/14			3,200						4,190	4,520	
0430618-1	6/18/14			2,440	2,350					3,340	3,480	
0430620-1	6/20/14			3,260	3,220					4,360	4,400	
0430623-1	6/23/14			2,680	2,640					3,360	3,420	
0430624-1	6/24/14			2,810	2,790					4,030	3,640	
0430625-1	6/25/14			2,870	2,820					3,860	3,790	
0430626-1	6/26/14			2,760	2,650					2,670	3,690	
0430627-1	6/27/14			3,070	3,200					4,310	4,250	
0430630-1	6/30/14			3,160	3,130					3,970	3,910	
0430701-1	7/1/14			2,830	2,830					3,690	3,830	
0430702-1	7/2/14			2,970	2,990					4,140	4,130	
0430703-1	7/3/14			2,540	2,610					3,630	3,510	
0430708-1	7/8/14			2,630	N/A							
0430711-1	*7/11/14*			3,040	2,900							Date correction
0430714-1	7/14/14	2,370		2,850	2,750							
0430715-1	7/15/14			2,930	3,090							
0430716-1	7/16/14			2,300	2,510							
0430721-1	7/21/14			2,010	1,860							
040723-1	7/23/14			2,160	2,070							
0430725-1	7/25/14			2,520	2,400							
				2,752	2,712					3,796	3,881	

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SAMPLING / TESTING OF PORTLAND CEMENT CONCRETE

Client **MOLTZ CONSTRUCTORS, INC.**
PO BOX 1030
CODY, WY 82414

Date of Report **09-04-14**
Job No. **3154JH043**
Event/Invoice No. **31540143-03** Lab No. **0430806-1**
Authorized By **GARY BORING** Date **08-05-14**
Sampled By **D. SENJEM** Date **08-06-14**
Submitted By **D. SENJEM** Date **08-07-14**

Client	**MOLTZ CONSTRUCTORS, INC.**
Project	**CONTINENTAL DAM REHABILITATION PROJECT**
Location	**SANTA MARIA IRRIGATION DISTRICT**
Source of Sample	**SLAB BF-1, STA: 0+19, 5' LT OF CL**
Architect/Engineer	**EDWIN TOMS, P.E.**
Contractor	**MOLTZ CONSTRUCTORS, INC.**
Supplier	**SOUTHWEST READY MIX**

Truck/Ticket No. **41/5027/5028/5029/** Mix Identification **BDP 20%/SM** Maximum Size Aggregate **3/4** inches
Batch Size **10.0** cubic yards Required Strength **4500** psi @ **18** days Water Added Before Sampling **20** gallons
Time In Mixer **1** hours **49** minutes Ambient Air Temperature **58** °F Time Sampled **1005**

FRESHLY MIXED CONCRETE SAMPLED IN ACCORDANCE WITH **ASTM C172**

Deviations: **SAMPLED MIDDLE THIRD OF LOAD BY SINGLE DISCHARGE**

FRESHLY MIXED CONCRETE TESTED IN ACCORDANCE WITH DESIGNATED SPECIFICATIONS

Unit Weight; **ASTM C138** **144.4** lbf/cu.ft. Temperature: **ASTM C1064** **70** °F
Air Content; **ASTM C231** **4.0** % Slump; **ASTM C143** **4 3/4** inches
Deviations: **ALL SAMPLE IDENTIFICATION AND FRESH CONCRETE TEST DATA WERE SUBMITTED BY WTI**

CYLINDRICAL CONCRETE SPECIMENS MOLDED & CURED IN THE FIELD IN ACCORDANCE WITH **ASTM C31**

No. of Specimens Molded **5** Diameter/Length **4.00** in.x **8** in. Cross Sectional Area **12.57** sq. in.
Deviations: **SPECIMEN ENVIRONMENT WAS NOT MONITERED Y WTI DURING INITIAL CURE**

CYLINDRICAL CONCRETE SPECIMENS CURED & TESTED IN THE LABORATORY IN ACCORDANCE WITH **ASTM C31 & C39**

Specimen Marking If Any	Date Tested	Age In Days	Time Tested	COMPRESSIVE STRENGTH Maximum Load lbf	COMPRESSIVE STRENGTH Maximum Load lbf per sq.in.	Conformance Indicated?	Type of Fracture & Defects Noted	Tested By
0430806-1	08-13-14	7	10:05	41945	3340		TYPE 2	BAM
0430806-1	08-13-14	7	10:08	38665	3080		TYPE 2	BAM
0430806-1	09-03-14	28	11:31	60860	4840		TYPE 5	JAH
0430806-1	09-03-14	28	11:59	58937	4690		TYPE 5	JAH
0430806-1		HOLD						
	AVERAGE	7			3210			
	AVERAGE	28			4770	YES		

Comments:

Distribution : **MOLTZ CONSTRUCTORS, INC. (1)**

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SAMPLING / TESTING OF PORTLAND CEMENT CONCRETE

Client **MOLTZ CONSTRUCTORS, INC.**
PO BOX 1030
CODY, WY 82414

Date of Report **09-04-14**
Job No. **3154JH043**
Event/Invoice No. **31540143-02** Lab No. **0430807-1**
Authorized By **GARY BORING** Date **08-05-14**
Sampled By **D. SENJEM** Date **08-07-14**
Submitted By **D. SENJEM** Date **08-08-14**

Client	**MOLTZ CONSTRUCTORS, INC.**
Project	**CONTINENTAL DAM REHABILITATION PROJECT**
Location	**SANTA MARIA IRRIGATION DISTRICT**
Source of Sample	**CONCRETE BACKFILL, SPILLWAY CHUTE, STA: 1+25, CL**
Architect/Engineer	**EDWIN TOMS, P.E.**
Contractor	**MOLTZ CONSTRUCTORS, INC.**
Supplier	**SOUTHWEST READY MIX**

Truck/Ticket No. **292/5044,5045** Mix Identification **312-F/CD** Maximum Size Aggregate **3/4** inches
Batch Size **7.5** cubic yards Required Strength **3000** psi @ **28** days Water Added Before Sampling **0** gallons
Time In Mixer **1** hours **5** minutes Ambient Air Temperature **48** °F Time Sampled **0840**

FRESHLY MIXED CONCRETE SAMPLED IN ACCORDANCE WITH **ASTM C172**
Deviations: **SAMPLED MIDDLE THIRD OF LOAD BY SINGLE DISCHARGE**

FRESHLY MIXED CONCRETE TESTED IN ACCORDANCE WITH DESIGNATED SPECIFICATIONS
Unit Weight; **ASTM C138** **142.3** lbf/cu.ft. Temperature: **ASTM C1064** **65** °F
Air Content; **ASTM C231** **5.5** % Slump; **ASTM C143** **5 1/4** inches
Deviations: **ALL SAMPLE IDENTIFICATION AND FRESH CONCRETE TETS DATA WERE SUBMITTED BY WTI**

CYLINDRICAL CONCRETE SPECIMENS MOLDED & CURED IN THE FIELD IN ACCORDANCE WITH **ASTM C31**
No. of Specimens Molded **5** Diameter/Length **4.00** in.x **8** in. Cross Sectional Area **12.57** sq. in.
Deviations: **SPECIMEN ENVIRONMENT WAS NOTMONITERED BY WTI DURING INITIAL CURE**

CYLINDRICAL CONCRETE SPECIMENS CURED & TESTED IN THE LABORATORY IN ACCORDANCE WITH **ASTM C31 & C39**

Specimen Marking If Any	Date Tested	Age In Days	Time Tested	COMPRESSIVE STRENGTH Maximum Load lbf	lbf per sq.in.	Conformance Indicated?	Type of Fracture & Defects Noted	Tested By
0430807-1	08-14-14	7	11:09	22863	1820		TYPE 2	JAH
0430807-1	08-14-14	7	11:19	21403	1700		TYPE 2	JAH
0430807-1	09-04-14	28	12:30	32246	2570		TYPE 2	JAH
0430807-1	09-04-14	28	12:33	32162	2560		TYPE 5	JAH
0430807-1	10-30-14	84						
	AVERAGE	7			1760			
	AVERAGE	28			2570	NO		

Comments:

Distribution : **MOLTZ CONSTRUCTORS, INC. (1)**

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REVIEWED BY **B. MCCALL**
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SAMPLING / TESTING OF PORTLAND CEMENT CONCRETE

Client **MOLTZ CONSTRUCTORS, INC.**
PO BOX 1030
CODY, WY 82414

Date of Report **09-08-14**
Job No. **3154JH043**
Event/Invoice No. **31540143-04** Lab No. **0430808-1**
Authorized By **GARY BORING** Date **08-06-14**
Sampled By **D. SENJEM** Date **08-08-14**
Submitted By **D. SENJEM** Date **08-12-14**

Client **MOLTZ CONSTRUCTORS, INC.**
Project **CONTINENTAL DAM REHABILITATION PROJECT**
Location **SANTA MARIA IRRIGATION DISTRICT**
Source of Sample **WALL, BWL-3, STA: 0+34**
Architect/Engineer **EDWIN TOMS, P.E.**
Contractor **MOLTZ CONSTRUCTORS, INC.**
Supplier **SOUTHWEST READY MIX**
Truck/Ticket No. **292/5070-5073** Mix Identification **BDP 20/SM** Maximum Size Aggregate **3/4** inches
Batch Size **10.0** cubic yards Required Strength **4500** psi @ **28** days Water Added Before Sampling **8** gallons
Time In Mixer **2** hours **19** minutes Ambient Air Temperature **57** °F Time Sampled **0936**

FRESHLY MIXED CONCRETE SAMPLED IN ACCORDANCE WITH **ASTM C172**
Deviations: **SAMPLED MIDDLE THIRD OF LOAD BY SINGLE DISCHARGE**

FRESHLY MIXED CONCRETE TESTED IN ACCORDANCE WITH DESIGNATED SPECIFICATIONS
Unit Weight; **ASTM C138** **140.9** lbf/cu.ft. Temperature: **ASTM C1064** **67** °F
Air Content; **ASTM C231** **5.8** % Slump; **ASTM C143** **4 3/4** inches
Deviations: **ALL SAMPLE IDENTIFICATION AND FRESH CONCRETE TEST DATA WERE SUBMITTED BY WTI**

CYLINDRICAL CONCRETE SPECIMENS MOLDED & CURED IN THE FIELD IN ACCORDANCE WITH **ASTM C31**
No. of Specimens Molded **5** Diameter/Length **4.00** in. x **8** in. Cross Sectional Area **12.57** sq. in.
Deviations: **SPECIMEN ENVIRONMENT WAS NOT MONITERED BY WTI DURING INITIAL CURE**

CYLINDRICAL CONCRETE SPECIMENS CURED & TESTED IN THE LABORATORY IN ACCORDANCE WITH **ASTM C31 & C39**

Specimen Marking If Any	Date Tested	Age In Days	Time Tested	COMPRESSIVE STRENGTH Maximum Load lbf	COMPRESSIVE STRENGTH Maximum Load lbf per sq.in.	Conformance Indicated?	Type of Fracture & Defects Noted	Tested By
0430808-1	08-15-14	7	10:29	37081	2950		TYPE 5	JAH
0430808-1	08-15-14	7	10:33	36841	2930		TYPE 2	JAH
0430808-1	09-05-14	28	08:47	49904	3970		TYPE 5	JAH
0430808-1	09-05-14	28	08:50	50964	4050		TYPE 5	JAH
0430808-1	10-31-14	84						
	AVERAGE	7			2940			
	AVERAGE	28			4010	NO		

Comments:

Distribution : **MOLTZ CONSTRUCTORS, INC. (1)**

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REVIEWED BY **B. MCCALL**
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SAMPLING / TESTING OF PORTLAND CEMENT CONCRETE

Client **MOLTZ CONSTRUCTORS, INC.**
PO BOX 1030
CODY, WY 82414

Date of Report **10-09-14**
Job No. **3154JH043**
Event/Invoice No. **31540143-05** Lab No. **0430812-1**
Authorized By **GARY BORING** Date **08-08-14**
Sampled By **D. SENJEM** Date **08-12-14**
Submitted By **D. SENJEM** Date **08-13-14**

Client **MOLTZ CONSTRUCTORS, INC.**
Project **CONTINENTAL DAM REHABILITATION PROJECT**
Location **SANTA MARIA IRRIGATION DISTRICT**
Source of Sample **CONCRETE BACKFILL SPILLWAY CHUTE, STA: 1+50 @ CL**
Architect/Engineer **EDWIN TOMS, P.E.**
Contractor **MOLTZ CONSTRUCTORS, INC.**
Supplier **SOUTHWEST READY MIX**

Truck/Ticket No. **292/5135-4137** Mix Identification **BDP 20%/SM** Maximum Size Aggregate **3/4** inches
Batch Size **6.5** cubic yards Required Strength **4000** psi @ **28** days Water Added Before Sampling **6** gallons
Time In Mixer **1** hours **35** minutes Ambient Air Temperature **43** °F Time Sampled **0841**

FRESHLY MIXED CONCRETE SAMPLED IN ACCORDANCE WITH **ASTM C172**
Deviations: **SAMPLED MIDDLE THIRD OF LOAD BY SINGLE DISCHARGE**

FRESHLY MIXED CONCRETE TESTED IN ACCORDANCE WITH DESIGNATED SPECIFICATIONS
Unit Weight; **ASTM C138** **144.3** lbf/cu.ft. Temperature: **ASTM C1064** **64** °F
Air Content; **ASTM C231** **4.6** % Slump; **ASTM C143** **5** inches
Deviations: **ALL SAMPLE IDENTIFICATION AND FRESH CONCRETE TEST DATA WERE SUBMITTED BY WTI**

CYLINDRICAL CONCRETE SPECIMENS MOLDED & CURED IN THE FIELD IN ACCORDANCE WITH **ASTM C31**
No. of Specimens Molded **5** Diameter/Length **4.00** In.x **8** in. Cross Sectional Area **12.57** sq. in.
Deviations: **SPECIMEN ENVIRONMENT WAS NOT MONITERED BY WTI DURING INITIAL CURE**

CYLINDRICAL CONCRETE SPECIMENS CURED & TESTED IN THE LABORATORY IN ACCORDANCE WITH **ASTM C31 & C39**

Specimen Marking If Any	Date Tested	Age In Days	Time Tested	COMPRESSIVE STRENGTH Maximum Load lbf	lbf per sq.in.	Conformance Indicated?	Type of Fracture & Defects Noted	Tested By
0430812-1	08-19-14	7	09:53	38566	3070		TYPE 2	JAH
0430812-1	08-19-14	7	10:01	40672	3240		TYPE 5	JAH
0430812-1	09-09-14	28	13:00	53216	4230		TYPE 5	JAH
0430812-1	09-09-14	28	13:04	53678	4270		TYPE 2	JAH
0430812-1		HOLD						
	AVERAGE	7			3160			
	AVERAGE	28			4250	YES		

Comments:

Distribution : **MOLTZ CONSTRUCTORS, INC. (1)**

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8/12/2014

Continental Dam Concrete Compressive Strengths - Required Strength 4000

Specimen Marking	Sample Date	Days 3	3	Days 7	7	Days 28	28	Days 56	56
0430531-2	5/31/14			1,820		2,930	2,920	4,000	
0430616-1	6/16/14			3,200		4,190	4,520		
0430618-1	6/18/14			2,440	2,350	3,340	3,480		
0430620-1	6/20/14			3,260	3,220	4,360	4,400		
0430623-1	6/23/14			2,680	2,640	3,360	3,420		
0430624-1	6/24/14			2,810	2,790	4,030	3,640		
0430625-1	6/25/14			2,870	2,820	3,860	3,790		
0430626-1	6/26/14			2,760	2,650	2,670	3,690		
0430627-1	6/27/14			3,070	3,200	4,310	4,250		
0430630-1	6/30/14			3,160	3,130	3,970	3,910		
0430701-1	7/1/14			2,830	2,830	3,690	3,830		
0430702-1	7/2/14			2,970	2,990	4,140	4,130		
0430703-1	7/3/14			2,540	2,610	3,630	3,510		
0430708-1	7/8/14			2,630	N/A	3,790	3,590		
0430711-1	7/11/14			3,040	2,900	4,040	4,150		
0430714-1	7/14/14	2,370		2,850	2,750	3,590	3,530		
0430715-1	7/15/14			2,930	3,090				
0430716-1	7/16/14			2,300	2,510				
0430721-1	7/21/14			2,010	1,860				
040723-1	7/23/14			2,160	2,070				
0430725-1	7/25/14			2,520	2,400				
0430729-1	7/29/14	1,820							
0430730-1	7/30/14			2,470	2,510				
0430801-1	8/1/14			2,490	2,500				
				2,727	2,691	3,798	3,856		

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SAMPLING / TESTING OF PORTLAND CEMENT CONCRETE

Client **MOLTZ CONSTRUCTORS, INC.**
PO BOX 1030
CODY, WY 82414

Date of Report **11-06-14**
Job No. **3154JH043**
Event/Invoice No. **31540143-06** Lab No. **0430813-1**
Authorized By **GARY BORING** Date **08-12-14**
Sampled By **D. SENJEM** Date **08-13-14**
Submitted By **D. SENJEM** Date **08-15-14**

Client	**MOLTZ CONSTRUCTORS, INC.**
Project	**CONTINENTAL DAM REHABILITATION PROJECT**
Location	**SANTA MARIA IRRIGATION DISTRICT**
Source of Sample	**BW-1 LOWER SECTION OF WALL, 0+05, LT.**
Architect/Engineer	**EDWIN TOMS, P.E.**
Contractor	**MOLTZ CONSTRUCTORS, INC.**
Supplier	**SOUTHWEST READY MIX**

Truck/Ticket No. **292/5170-5172** Mix Identification **BDP 20%/SM** Maximum Size Aggregate **3/4** inches
Batch Size **9.0** cubic yards Required Strength **4000** psi @ **28** days Water Added Before Sampling **15** gallons
Time In Mixer **1** hours **56** minutes Ambient Air Temperature **46** °F Time Sampled **0908**

FRESHLY MIXED CONCRETE SAMPLED IN ACCORDANCE WITH **ASTM C172**

Deviations: **SAMPLED MIDDLE THIRD OF LOAD BY SINGLE DISCHARGE**

FRESHLY MIXED CONCRETE TESTED IN ACCORDANCE WITH DESIGNATED SPECIFICATIONS

Unit Weight; **ASTM C138** **137.9** lbf/cu.ft. Temperature: **ASTM C1064** **65** °F
Air Content; **ASTM C231** **7.0** % Slump; **ASTM C143** **5** inches
Deviations: **ALL SAMPLE IDENTIFICATION AND FRESH CONCRETE TEST DATA WERE SUBMITTED BY WTI**

CYLINDRICAL CONCRETE SPECIMENS MOLDED & CURED IN THE FIELD IN ACCORDANCE WITH **ASTM C31**

No. of Specimens Molded **5** Diameter/Length **4.00** in.x **8** in. Cross Sectional Area **12.57** sq. in.
Deviations: **SPECIMEN ENVIRONMENT WAS NOT MONITERED BY WTI DURING INTITIAL CURE**

CYLINDRICAL CONCRETE SPECIMENS CURED & TESTED IN THE LABORATORY IN ACCORDANCE WITH **ASTM C31 & C39**

Specimen Marking If Any	Date Tested	Age In Days	Time Tested	COMPRESSIVE STRENGTH Maximum Load lbf	COMPRESSIVE STRENGTH Maximum Load lbf per sq.in.	Conformance Indicated?	Type of Fracture & Defects Noted	Tested By
0430813-1	08-20-14	7	17:07	37124	2950		TYPE 1	GT
0430813-1	08-20-14	7	17:10	36968	2940		TYPE 1	GT
0430813-1	09-10-14	28	09:02	44871	3570		TYPE 2	JAH
0430813-1	09-10-14	28	09:05	47303	3760		TYPE 5	JAH
0430813-1	11-05-14	84	17:11	58019	4620	YES	TYPE 5	DS
	AVERAGE	7			2950			
	AVERAGE	28			3670	NO		

Comments:

Distribution : **MOLTZ CONSTRUCTORS, INC. (1)**

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SAMPLING / TESTING OF PORTLAND CEMENT CONCRETE

Client **MOLTZ CONSTRUCTORS, INC.**
PO BOX 1030
CODY, WY 82414

Date of Report **11-07-14**
Job No. **3154JH043**
Event/Invoice No. **31540145-09** Lab No. **0430815-1**
Authorized By **GARY BORING** Date **08-13-14**
Sampled By **D. SENJEM** Date **08-15-14**
Submitted By **D. SENJEM** Date **08-20-14**

Client **MOLTZ CONSTRUCTORS, INC.**
Project **CONTINENTAL DAM REHABILITATION PROJECT**
Location **SANTA MARIA IRRIGATION DISTRICT**
Source of Sample **SPILLWAY CHUTE, CONCRETE BACKFILL, STA: 2+45 @ CL**
Architect/Engineer **EDWIN TOMS, P.E.**
Contractor **MOLTZ CONSTRUCTORS, INC.**
Supplier **SOUTHWEST READY MIX**
Truck/Ticket No. **292/5227-5229** Mix Identification **312-F/CD** Maximum Size Aggregate **3/4** inches
Batch Size **10.0** cubic yards Required Strength **3000** psi @ **28** days Water Added Before Sampling **10** gallons
Time In Mixer **1** hours **7** minutes Ambient Air Temperature **46** °F Time Sampled **0854**

FRESHLY MIXED CONCRETE SAMPLED IN ACCORDANCE WITH **ASTM C172**
Deviations: **SAMPLED MIDDLE THIRD OF LOAD BY SINGLE DISCHARGE**

FRESHLY MIXED CONCRETE TESTED IN ACCORDANCE WITH DESIGNATED SPECIFICATIONS
Unit Weight; **ASTM C138** **140.5** lbf/cu.ft. Temperature: **ASTM C1064** **67** °F
Air Content; **ASTM C231** **5.6** % Slump; **ASTM C143** **4 3/4** inches
Deviations: **ALL SAMPLE IDENTIFICATION AND FRESH CONCRETE TEST DATA WERE SUBMITTED BY WTI**

CYLINDRICAL CONCRETE SPECIMENS MOLDED & CURED IN THE FIELD IN ACCORDANCE WITH **ASTM C31**
No. of Specimens Molded **5** Diameter/Length **4.00** in.x **8** in. Cross Sectional Area **12.57** sq. in.
Deviations: **SPECIMEN ENVIRONMENT WAS NOT MONITERED BY WTI DURING INITIAL CURE**

CYLINDRICAL CONCRETE SPECIMENS CURED & TESTED IN THE LABORATORY IN ACCORDANCE WITH **ASTM C31 & C39**

Specimen Marking If Any	Date Tested	Age In Days	Time Tested	COMPRESSIVE STRENGTH Maximum Load lbf	lbf per sq.in.	Conformance Indicated?	Type of Fracture & Defects Noted	Tested By
0430815-1	08-22-14	7					LAB ACCIDENT	JAH
0430815-1	08-22-14	7	12:01	21375	1700		TYPE 2	JAH
0430815-1	09-12-14	28	09:43	29843	2370		TYPE 3	JAH
0430815-1	09-12-14	28	09:47	29377	2340		TYPE 4	JAH
0430815-1	11-07-14	84	09:43	39400	3130	YES	TYPE 2	JAH
	AVERAGE	28			2360	NO		

Comments:

Distribution : **MOLTZ CONSTRUCTORS, INC. (1)**

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SAMPLING / TESTING OF PORTLAND CEMENT CONCRETE

Client **MOLTZ CONSTRUCTORS, INC.**
PO BOX 1030
CODY, WY 82414

Date of Report **09-17-14**
Job No. **3154JH043**
Event/Invoice No. **31540145-10** Lab No. **0430819-1**
Authorized By **GARY BORING** Date **08-15-14**
Sampled By **D. SENJEM** Date **08-19-14**
Submitted By **D. SENJEM** Date **08-22-14**

Client **MOLTZ CONSTRUCTORS, INC.**
Project **CONTINENTAL DAM REHABILITATION PROJECT**
Location **SANTA MARIA IRRIGATION DISTRICT**
Source of Sample **WALL, BWL-2, STA: 0+09 LT.**
Architect/Engineer **EDWIN TOMS, P.E.**
Contractor **MOLTZ CONSTRUCTORS, INC.**
Supplier **SOUTHWEST READY MIX**
Truck/Ticket No. **25/5259-5261** Mix Identification **BDP 20%/SM** Maximum Size Aggregate **3/4** inches
Batch Size **9.0** cubic yards Required Strength **4000** psi @ **28** days Water Added Before Sampling **8** gallons
Time In Mixer **1** hours **50** minutes Ambient Air Temperature **56** °F Time Sampled **0932**

FRESHLY MIXED CONCRETE SAMPLED IN ACCORDANCE WITH **ASTM C172**
Deviations: **SAMPLED MIDDLE THIRD OF LOAD BY SINGLE DISCHARGE**

FRESHLY MIXED CONCRETE TESTED IN ACCORDANCE WITH DESIGNATED SPECIFICATIONS
Unit Weight; **ASTM C138** **143.8** lbf/cu.ft. Temperature: **ASTM C1064** **70** °F
Air Content; **ASTM C231** **4.6** % Slump: **ASTM C143** **3 1/4** inches
Deviations: **ALL SAMPLE IDENTIFICATION AND FRESH CONCRETE TEST DATA WERE SUBMITTED BY WTI**

CYLINDRICAL CONCRETE SPECIMENS MOLDED & CURED IN THE FIELD IN ACCORDANCE WITH **ASTM C31**
No. of Specimens Molded **5** Diameter/Length **4.00** in.x **8** in. Cross Sectional Area **12.57** sq. in.
Deviations: **SPECIMEN ENVIRONMENT WAS NOT MONITERED BY WTI DURING INITIAL CURE**

CYLINDRICAL CONCRETE SPECIMENS CURED & TESTED IN THE LABORATORY IN ACCORDANCE WITH **ASTM C31 & C39**

Specimen Marking If Any	Date Tested	Age In Days	Time Tested	COMPRESSIVE STRENGTH Maximum Load lbf	COMPRESSIVE STRENGTH Maximum Load lbf per sq.in.	Conformance Indicated?	Type of Fracture & Defects Noted	Tested By
0430819-1	08-26-14	7	13:06	40757	3240		TYPE 3	CJ
0430819-1	08-26-14	7	13:09	36473	2900		TYPE 4	CJ
0430819-1	09-16-14	28	08:56	52251	4160		TYPE 5	JAH
0430819-1	09-16-14	28	09:01	51154	4070		TYPE 5	JAH
0430819-1		HOLD						
	AVERAGE	7			3070			
	AVERAGE	28			4120	YES		

Comments:

Distribution : **MOLTZ CONSTRUCTORS, INC. (1)**

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SAMPLING / TESTING OF PORTLAND CEMENT CONCRETE

Client **MOLTZ CONSTRUCTORS, INC.**
PO BOX 1030
CODY, WY 82414

Date of Report **10-17-14**
Job No. **3154JH043**
Event/Invoice No. **31540145-11** Lab No. **0430821-1**
Authorized By **GARY BORING** Date **08-20-14**
Sampled By **D. SENJEM** Date **08-21-14**
Submitted By **D. SENJEM** Date **08-22-14**

Client	**MOLTZ CONSTRUCTORS, INC.**
Project	**CONTINENTAL DAM REHABILITATION PROJECT**
Location	**SANTA MARIA IRRIGATION DISTRICT**
Source of Sample	**WALL, BWR-2, STA: 0+08**
Architect/Engineer	**EDWIN TOMS, P.E.**
Contractor	**MOLTZ CONSTRUCTORS, INC.**
Supplier	**SOUTHWEST READY MIX**

Truck/Ticket No. **292/5284-5287** Mix Identification **BDP 20%/SM** Maximum Size Aggregate **3/4** inches
Batch Size **10.0** cubic yards Required Strength **4000** psi @ **28** days Water Added Before Sampling **12** gallons
Time In Mixer **1** hours **28** minutes Ambient Air Temperature **70** °F Time Sampled **1252**

FRESHLY MIXED CONCRETE SAMPLED IN ACCORDANCE WITH **ASTM C172**

Deviations: **SAMPLED MIDDLE THIRD OF LOAD BY SINGLE DISCHARGE**

FRESHLY MIXED CONCRETE TESTED IN ACCORDANCE WITH DESIGNATED SPECIFICATIONS

Unit Weight; **ASTM C138** **137.9** lbf/cu.ft. Temperature: **ASTM C1064** **75** °F
Air Content; **ASTM C231** **7.0** % Slump; **ASTM C143** **5 1/4** inches
Deviations: **ALL SAMPLE IDENTIFICATION AND FRESH CONCRETE TEST DATA WERE SUBMITTED BY WTI**

CYLINDRICAL CONCRETE SPECIMENS MOLDED & CURED IN THE FIELD IN ACCORDANCE WITH **ASTM C31**

No. of Specimens Molded **5** Diameter/Length **4.00** in.x **8** in. Cross Sectional Area **12.57** sq. in.
Deviations: **SPECIMEN ENVIRONMENT WAS NOT MONITERED BY WTI DURING INITIAL CURE**

CYLINDRICAL CONCRETE SPECIMENS CURED & TESTED IN THE LABORATORY IN ACCORDANCE WITH **ASTM C31 & C39**

Specimen Marking If Any	Date Tested	Age In Days	Time Tested	COMPRESSIVE STRENGTH Maximum Load lbf	COMPRESSIVE STRENGTH Maximum Load lbf per sq.in.	Conformance Indicated?	Type of Fracture & Defects Noted	Tested By
0430821-1	08-28-14	7	10:05	34720	2760		TYPE 5	JAH
0430821-1	08-28-14	7	10:08	35074	2790		TYPE 5	JAH
0430821-1	09-18-14	28	09:49	48476	3860		TYPE 2	JAH
0430821-1	09-18-14	28	09:51	41535	3300		TYPE 5	JAH
0430821-1	11-13-14	84	09:33	52477	4180	YES	TYPE 3	MW
	AVERAGE	7			2780			
	AVERAGE	28			3580	NO		

Comments:

Distribution : **MOLTZ CONSTRUCTORS, INC. (1)**

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REVIEWED BY **F. HAMPTON**
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(970) 375-9033

SAMPLING / TESTING OF PORTLAND CEMENT CONCRETE

Client **MOLTZ CONSTRUCTORS, INC.**
PO BOX 1030
CODY, WY 82414

Date of Report **09-22-14**
Job No. **3154JH043**
Event/Invoice No. **31540145-12** Lab No. **0430825-1**
Authorized By **GARY BORING** Date **08-22-14**
Sampled By **D. SENJEM** Date **08-25-15**
Submitted By **D. SENJEM** Date **08-27-14**

Client	**MOLTZ CONSTRUCTORS, INC.**
Project	**CONTINENTAL DAM REHABILITATION PROJECT**
Location	**SANTA MARIA IRRIGATION DISTRICT**
Source of Sample	**SPILLWAY CHUTE SLAB, CF-11, STA: 2+40, CL**
Architect/Engineer	**EDWIN TOMS, P.E.**
Contractor	**MOLTZ CONSTRUCTORS, INC.**
Supplier	**SOUTHWEST READY MIX**

Truck/Ticket No. **25/5412-5414** Mix Identification **BDP 20%/SM** Maximum Size Aggregate **3/4** inches
Batch Size **6.5** cubic yards Required Strength **4000** psi @ **28** days Water Added Before Sampling **0** gallons
Time In Mixer **1** hours **16** minutes Ambient Air Temperature **45** °F Time Sampled **0834**

FRESHLY MIXED CONCRETE SAMPLED IN ACCORDANCE WITH **ASTM C172**

Deviations: **SAMPLED MIDDLE THIRD OF LOAD BY SINGLE DISCHARGE**

FRESHLY MIXED CONCRETE TESTED IN ACCORDANCE WITH DESIGNATED SPECIFICATIONS

Unit Weight; **ASTM C138** **141.3** lbf/cu.ft. Temperature: **ASTM C1064** **64** °F
Air Content; **ASTM C231** **5.1** % Slump: **ASTM C143** **4 1/4** inches
Deviations: **ALL SAMPLE IDENTIFICATION AND FRESH CONCRETE TEST DATA WERE SUBMITTED BY WTI**

CYLINDRICAL CONCRETE SPECIMENS MOLDED & CURED IN THE FIELD IN ACCORDANCE WITH **ASTM C31**

No. of Specimens Molded **5** Diameter/Length **4.00** in. x **8** in. Cross Sectional Area **12.57** sq. in.
Deviations: **SPECIMEN ENVIRONMENT WAS NOT MONITERED BY WTI DURING INITIAL CURE**

CYLINDRICAL CONCRETE SPECIMENS CURED & TESTED IN THE LABORATORY IN ACCORDANCE WITH **ASTM C31 & C39**

Specimen Marking If Any	Date Tested	Age In Days	Time Tested	COMPRESSIVE STRENGTH Maximum Load lbf	COMPRESSIVE STRENGTH Maximum Load lbf per sq. in.	Conformance Indicated?	Type of Fracture & Defects Noted	Tested By
0430825-1	09-02-15	8	12:08	42080	3350		TYPE 2	JAH
0430825-1	09-02-15	8	12:12	44857	3570		TYPE 5	JAH
0430825-1	09-22-15	28	10:11	45216	3600		TYPE 5	JAH
0430825-1	09-22-15	28	10:14	53268	4240		TYPE 5	JAH
0430825-1	11-17-15	84						
	AVERAGE	8			3460			
	AVERAGE	28			3920	NO		

Comments:

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278 Sawyer Drive, No. 2
Durango, CO 81303
(970) 375-9033

SAMPLING / TESTING OF PORTLAND CEMENT CONCRETE

Client **MOLTZ CONSTRUCTORS, INC.**
PO BOX 1030
CODY, WY 82414

Date of Report **10-01-14**
Job No. **3154JH043**
Event/Invoice No. **31540164-03** Lab No. **0430902-1**
Authorized By **GARY BORING** Date **08-28-14**
Sampled By **D. SENJEM** Date **09-02-14**
Submitted By **D. SENJEM** Date **09-03-14**

Client **MOLTZ CONSTRUCTORS, INC.**
Project **CONTINENTAL DAM REHABILITATION PROJECT**
Location **SANTA MARIA IRRIGATION DISTRICT**
Source of Sample **SPILLWAY CHUTE, CF-9, STA: 2+00, CL**
Architect/Engineer **EDWIN TOMS, P.E.**
Contractor **MOLTZ CONSTRUCTORS, INC.**
Supplier **SOUTHWEST READY MIX**
Truck/Ticket No. **292/5465-5468** Mix Identification **BDP 20% SM** Maximum Size Aggregate **3/4** inches
Batch Size **10.0** cubic yards Required Strength **4000** psi @ **28** days Water Added Before Sampling **20** gallons
Time In Mixer **1** hours **46** minutes Ambient Air Temperature **62** °F Time Sampled **1053**

FRESHLY MIXED CONCRETE SAMPLED IN ACCORDANCE WITH **ASTM C172**
Deviations: **SAMPLED MIDDLE THIRD OF LOAD BY SINGLE DISCHARGE**

FRESHLY MIXED CONCRETE TESTED IN ACCORDANCE WITH DESIGNATED SPECIFICATIONS
Unit Weight; **ASTM C138** **137.5** lbf/cu.ft. Temperature: **ASTM C1064** **66** °F
Air Content; **ASTM C231** **7.4** % Slump; **ASTM C143** **6 1/4** inches
Deviations: **ALL SAMPLE IDENTIFICATION AND FRESH CONCRETE TEST DATA WERE SUBMITTED BY WTI**

CYLINDRICAL CONCRETE SPECIMENS MOLDED & CURED IN THE FIELD IN ACCORDANCE WITH **ASTM C31**
No. of Specimens Molded **5** Diameter/Length **4.00** in.x **8** in. Cross Sectional Area **12.57** sq. in.
Deviations: **SPECIMEN ENVIRONMENT WAS NOT MONITERED BY WTI DURING INITIAL CURE**

CYLINDRICAL CONCRETE SPECIMENS CURED & TESTED IN THE LABORATORY IN ACCORDANCE WITH **ASTM C31 & C39**

Specimen Marking If Any	Date Tested	Age In Days	Time Tested	COMPRESSIVE STRENGTH Maximum Load lbf	COMPRESSIVE STRENGTH Maximum Load lbf per sq.in.	Conformance Indicated?	Type of Fracture & Defects Noted	Tested By
0430902-1	09-09-14	7	13:28	37859	3010		TYPE 2	JAH
0430902-1	09-09-14	7	13:31	34381	2740		TYPE 5	JAH
0430902-1	09-30-14	28	10:03	45168	3590		TYPE 5	JAH
0430902-1	09-30-14	28	10:05	47727	3800		TYPE 5	JAH
0430902-1	11-25-14	84						
	AVERAGE	7			2880			
	AVERAGE	28			3700	NO		

Comments:

Distribution : **MOLTZ CONSTRUCTORS, INC. (1)**

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SAMPLING / TESTING OF PORTLAND CEMENT CONCRETE

Client **MOLTZ CONSTRUCTORS, INC.**
PO BOX 1030
CODY, WY 82414

Date of Report **10-01-14**
Job No. **3154JH043**
Event/Invoice No. **31540164-01** Lab No. **0430903-1**
Authorized By **GARY BORING** Date **08-28-14**
Sampled By **D. SENJEM** Date **09-03-14**
Submitted By **D. SENJEM** Date **09-04-14**

Client **MOLTZ CONSTRUCTORS, INC.**
Project **CONTINENTAL DAM REHABILITATION PROJECT**
Location **SANTA MARIA IRRIGATION DISTRICT**
Source of Sample **SPILLWAY CHANNEL, CF-5, STA: 1+20 AT CL**
Architect/Engineer **EDWIN TOMS, P.E.**
Contractor **MOLTZ CONSTRUCTORS, INC.**
Supplier **SOUTHWEST READY MIX**
Truck/Ticket No. **292/** Mix Identification **BDP 20% SM** Maximum Size Aggregate **3/4** inches
Batch Size cubic yards Required Strength **4500** psi @ **28** days Water Added Before Sampling **3** gallons
Time In Mixer hours minutes Ambient Air Temperature **64** °F Time Sampled **1053**

FRESHLY MIXED CONCRETE SAMPLED IN ACCORDANCE WITH **ASTM C172**
Deviations: **SAMPLED MIDDLE THIRD OF LOAD BY SINGLE DISCHARGE**

FRESHLY MIXED CONCRETE TESTED IN ACCORDANCE WITH DESIGNATED SPECIFICATIONS
Unit Weight; **ASTM C138** **143.1** lbf/cu.ft. Temperature: **ASTM C1064** **72** °F
Air Content; **ASTM C231** **4.3** % Slump; **ASTM C143** **4 3/4** inches
Deviations: **ALL SAMPLE IDENTIFICATION AND FRESH COCNRETE TEST DATA WERE SUBMITTED BY WTI**

CYLINDRICAL CONCRETE SPECIMENS MOLDED & CURED IN THE FIELD IN ACCORDANCE WITH **ASTM C31**
No. of Specimens Molded **5** Diameter/Length **4.00** in.x **8** in. Cross Sectional Area **12.57** sq. in.
Deviations: **SPECIMEN ENVIRONMENT WAS NOT MONITERED BY WTI DURING INTIAL CURE**

CYLINDRICAL CONCRETE SPECIMENS CURED & TESTED IN THE LABORATORY IN ACCORDANCE WITH **ASTM C31 & C39**

Specimen Marking If Any	Date Tested	Age In Days	Time Tested	COMPRESSIVE STRENGTH Maximum Load lbf	COMPRESSIVE STRENGTH Maximum Load lbf per sq.in.	Conformance Indicated?	Type of Fracture & Defects Noted	Tested By
0430903-1	**09-10-14**	**7**	**09:57**	**41619**	**3310**		**TYPE 5**	**JAH**
0430903-1	**09-10-14**	**7**	**10:00**	**41930**	**3340**		**TYPE 2**	**JAH**
0430903-1	**10-01-14**	**28**	**09:48**	**52590**	**4180**		**TYPE 3**	**JAH**
0430903-1	**10-01-14**	**28**	**09:51**	**58330**	**4640**		**TYPE 1**	**JAH**
0430903-1	**11-26-14**	**84**						
	AVERAGE	**7**			**3330**			
	AVERAGE	**28**			**4410**	**NO**		

Comments:

Distribution : **MOLTZ CONSTRUCTORS, INC. (1)**

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SAMPLING / TESTING OF PORTLAND CEMENT CONCRETE

Client **MOLTZ CONSTRUCTORS, INC.**
PO BOX 1030
CODY, WY 82414

Date of Report **10-02-14**
Job No. **3154JH043**
Event/Invoice No. **31540164-04** Lab No. **0430904-1**
Authorized By **GARY BORING** Date **08-28-14**
Sampled By **D. SENJEM** Date **09-04-14**
Submitted By **D. SENJEM** Date **09-05-14**

Client **MOLTZ CONSTRUCTORS, INC.**
Project **CONTINENTAL DAM REHABILITATION PROJECT**
Location **SANTA MARIA IRRIGATION DISTRICT**
Source of Sample **SPILLWAY CHANNEL SLAB, CF-3, STA: 0+74, 5' LT. OF CL**
Architect/Engineer **EDWIN TOMS, P.E.**
Contractor **MOLTZ CONSTRUCTORS, INC.**
Supplier **SOUTHWEST READY MIX**
Truck/Ticket No. **25/5515-5517** Mix Identification **BDP 20%/SM** Maximum Size Aggregate **2/4** inches
Batch Size **9.0** cubic yards Required Strength **4000** psi @ **28** days Water Added Before Sampling **6** gallons
Time In Mixer **1** hours **48** minutes Ambient Air Temperature **61** °F Time Sampled **1348**

FRESHLY MIXED CONCRETE SAMPLED IN ACCORDANCE WITH **ASTM C172**
Deviations: **SAMPLED MIDDEL THIRD OF LOAD BY SINGLE DISHCARGE**

FRESHLY MIXED CONCRETE TESTED IN ACCORDANCE WITH DESIGNATED SPECIFICATIONS
Unit Weight; **ASTM C138** **141.1** lbf/cu.ft. Temperature: **ASTM C1064** **74** °F
Air Content; **ASTM C231** **5.8** % Slump; **ASTM C143** **5** inches
Deviations: **ALL SAMPLE IDENTIFICATION AND FRESH COCNRETE TEST DATA WERE SUBMITTED BY WTI**

CYLINDRICAL CONCRETE SPECIMENS MOLDED & CURED IN THE FIELD IN ACCORDANCE WITH **ASTM C31**
No. of Specimens Molded **5** Diameter/Length **4.00** in.x **8** in. Cross Sectional Area **12.57** sq. in.
Deviations: **SPECIMEN NEVIORNMENT WA SNOT MONITERED BY WTI DURING INITIAL CURE**

CYLINDRICAL CONCRETE SPECIMENS CURED & TESTED IN THE LABORATORY IN ACCORDANCE WITH **ASTM C31 & C39**

Specimen Marking If Any	Date Tested	Age In Days	Time Tested	COMPRESSIVE STRENGTH Maximum Load lbf	lbf per sq.in.	Conformance Indicated?	Type of Fracture & Defects Noted	Tested By
0430904-1	09-11-14	7	09:15	42241	3360		TYPE 1	JAH
0430904-1	09-11-14	7	09:20	42863	3410		TYPE 4	JAH
0430904-1	10-02-14	28	09:54	55191	4390		TYPE 5	JAH
0430904-1	10-02-14	28	09:57	57326	4560		TYPE 1	JAH
0430904-1		HOLD						
	AVERAGE	7			3390			
	AVERAGE	28			4480	YES		

Comments:

Distribution : **MOLTZ CONSTRUCTORS, INC. (1)**

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SAMPLING / TESTING OF PORTLAND CEMENT CONCRETE

Client **MOLTZ CONSTRUCTORS, INC.**
PO BOX 1030
CODY, WY 82414

Date of Report **10-03-14**
Job No. **3154JH043**
Event/Invoice No. **31540164-05** Lab No. **0430905-1**
Authorized By **GARY BORING** Date **08-28-14**
Sampled By **D. SENJEM** Date **09-05-14**
Submitted By **D. SENJEM** Date **09-08-14**

Client **MOLTZ CONSTRUCTORS, INC.**
Project **CONTINENTAL DAM REHABILITATION PROJECT**
Location **SANTA MARIA IRRIGATION DISTRICT**
Source of Sample **SPILLWAY CHANNEL FLOOR SLAB, CF-10, STA: 2+18, 3' LT. OF CL**
Architect/Engineer **EDWIN TOMS, P.E.**
Contractor **MOLTZ CONSTRUCTORS, INC.**
Supplier **SOUTHWEST READY MIX**
Truck/Ticket No. **292/5537-5540** Mix Identification **BDP 20%/SM** Maximum Size Aggregate **3/4** inches
Batch Size **10.0** cubic yards Required Strength **4000** psi @ **28** days Water Added Before Sampling **10** gallons
Time In Mixer **1** hours **14** minutes Ambient Air Temperature **61** °F Time Sampled **1041**

FRESHLY MIXED CONCRETE SAMPLED IN ACCORDANCE WITH **ASTM C172**
Deviations: **SAMPLED MIDDLE THIRD OF LOAD BY SINGLE DISCHARGE**

FRESHLY MIXED CONCRETE TESTED IN ACCORDANCE WITH DESIGNATED SPECIFICATIONS
Unit Weight; **ASTM C138** **139.7** lbf/cu.ft. Temperature: **ASTM C1064** **64** °F
Air Content; **ASTM C231** **5.8** % Slump; **ASTM C143** **6 1/4** inches
Deviations: **ALL SAMPLE IDENTIFICATION AND FRESH CONCRETE TEST DATA WERE SUBMITTED BY WTI**

CYLINDRICAL CONCRETE SPECIMENS MOLDED & CURED IN THE FIELD IN ACCORDANCE WITH **ASTM C31**
No. of Specimens Molded **5** Diameter/Length **4.00** in.x **8** in. Cross Sectional Area **12.57** sq. in.
Deviations: **SPECIMEN ENVIRONMENT WAS NOT MONITORED BY WT DURING INITIAL CURE.**
SPECIMENS REMAINED IN FIELD MORE THAN 48 HOURS.

CYLINDRICAL CONCRETE SPECIMENS CURED & TESTED IN THE LABORATORY IN ACCORDANCE WITH **ASTM C31 & C39**

Specimen Marking If Any	Date Tested	Age In Days	Time Tested	COMPRESSIVE STRENGTH Maximum Load lbf	lbf per sq.in.	Conformance Indicated?	Type of Fracture & Defects Noted	Tested By
0430905-1	**09-12-14**	**7**	**10:05**	**35781**	**2850**		**TYPE 5**	**JAH**
0430905-1	**09-12-14**	**7**	**10:07**	**35272**	**2810**		**TYPE 5**	**JAH**
0430905-1	**10-03-14**	**28**	**08:54**	**51544**	**4100**		**TYPE 5**	**JAH**
0430905-1	**10-03-14**	**28**	**08:58**	**49833**	**3960**		**TYPE 5**	**JAH**
0430905-1	**11-28-14**	**84**						
	AVERAGE	**7**			**2830**			
	AVERAGE	**28**			**4030**	**YES**		

Comments:

Distribution : **MOLTZ CONSTRUCTORS, INC. (1)**

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9/8/2014

Continental Dam Concrete Compressive Strengths - Required Strength 3000

Specimen Marking	Sample Date	Days 7	7	Days 28	28	Days 56	56
0430531-1	5/31/14	1,890		3,010	3,030		
0430531-2	5/31/14	1,820		2,930	2,920	4,000	
0430807-1	8/7/14	1,820	1,700	2,570	2,560		
0430815-1	8/15/14	N/A	1,700				
		1,843		2,837	8,510		

9/8/2014

Continental Dam Concrete Compressive Strengths - Required Strength 4000

Specimen Marking	Sample Date	Days 3	3	Days 7	7	Days 28	28	Days 56	56
0430616-1	6/16/14			3,200		4,190	4,520		
0430618-1	6/18/14			2,440	2,350	3,340	3,480		
0430620-1	6/20/14			3,260	3,220	4,360	4,400		
0430623-1	6/23/14			2,680	2,640	3,360	3,420		
0430624-1	6/24/14			2,810	2,790	4,030	3,640	4,380	
0430625-1	6/25/14			2,870	2,820	3,860	3,790	4,540	
0430626-1	6/26/14			2,760	2,650	2,670	3,690		
0430627-1	6/27/14			3,070	3,200	4,310	4,250		
0430630-1	6/30/14			3,160	3,130	3,970	3,910		
0430701-1	7/1/14			2,830	2,830	3,690	3,830		
0430702-1	7/2/14			2,970	2,990	4,140	4,130		
0430703-1	7/3/14			2,540	2,610	3,630	3,510	4,170	
0430708-1	7/8/14			2,630	N/A	3,790	3,590	4,190	
0430711-1	7/11/14			3,040	2,900	4,040	4,150		
0430714-1	7/14/14	2,370		2,850	2,750	3,590	3,530		
0430715-1	7/15/14			2,930	3,090	3,800	4,030		
0430716-1	7/16/14			2,300	2,510	3,390	3,390		
0430721-1	7/21/14			2,010	1,860	2,680	2,830		
0430723-1	7/23/14			2,160	2,070	2,980	2,830		
0430725-1	7/25/14			2,520	2,400	3,380	3,240		
0430729-1	7/29/14	1,820		2,130	2,200	2,980	2,830		
0430730-1	7/30/14			2,470	2,510				
0430801-1	8/1/14			2,490	2,500	3,530	3,350		
0430812-1	8/12/14			3,070	3,240				
0430819-1	8/19/14			3,240	2,900				
0430821-1	8/21/14			2,760	2,790				
0430825-1	8/25/14			3,350	3,570				
				2,761	2,741	3,623	3,652		

9/8/2014

Continental Dam Concrete Compressive Strengths - Required Strength 4500

Specimen Marking	Sample Date	Days 3	3	Days 7	7	Days 28	28	Days 56	56
0430806-1	8/6/14			3,340	3,080	4,840	4,690		
0430808-1	8/8/14			2,950	2,930	3,970	4,050		
0430813-1	8/13/14			2,950	2,940				

SAMPLING / TESTING OF PORTLAND CEMENT CONCRETE

Client **MOLTZ CONSTRUCTORS, INC.**
PO BOX 1030
CODY, WY 82414

Date of Report **10-08-14**
Job No. **3154JH043**
Event/Invoice No. **31540164-06** Lab No. **0430910-1**
Authorized By **GARY BORING** Date **09-08-14**
Sampled By **D. SENJEM** Date **09-10-14**
Submitted By **D. SENJEM** Date **09-12-14**

Client	**MOLTZ CONSTRUCTORS, INC.**
Project	**CONTINENTAL DAM REHABILITATION PROJECT**
Location	**SANTA MARIA IRRIGATION DISTRICT**
Source of Sample	**CHANNEL SLAB, CF-6, STA: 1+40 AT CL**
Architect/Engineer	**EDWIN TOMS, P.E.**
Contractor	**MOLTZ CONSTRUCTORS, INC.**
Supplier	**SOUTHWEST READY MIX**

Truck/Ticket No. **292/5565-5568** Mix Identification **BDP 20%/SM** Maximum Size Aggregate **3/4** inches
Batch Size **10.0** cubic yards Required Strength **4000** psi @ **28** days Water Added Before Sampling **0** gallons
Time In Mixer **1** hours **10** minutes Ambient Air Temperature **42** °F Time Sampled **0839**

FRESHLY MIXED CONCRETE SAMPLED IN ACCORDANCE WITH **ASTM C172**

Deviations: **SAMPLED MIDDLE THIRD OF LOAD BY SINGLE DISCHARGE.**

FRESHLY MIXED CONCRETE TESTED IN ACCORDANCE WITH DESIGNATED SPECIFICATIONS

Unit Weight; **ASTM C138** **139.3** lbf/cu.ft. Temperature: **ASTM C1064** **60** °F
Air Content; **ASTM C231** **6.4** % Slump; **ASTM C143** **5 1/4** inches

Deviations: **ALL SAMPLE IDENTIFICATION AND FRESH CONCRETE TEST DATA WERE SUBMITTED BY OTHERS.**

CYLINDRICAL CONCRETE SPECIMENS MOLDED & CURED IN THE FIELD IN ACCORDANCE WITH **ASTM C31**

No. of Specimens Molded **5** Diameter/Length **4.00** in.x **8** in. Cross Sectional Area **12.57** sq. in.

Deviations: **SPECIMEN ENVIRONMENT WAS NOT MONITORED BY WT DURING INITIAL CURE.**

CYLINDRICAL CONCRETE SPECIMENS CURED & TESTED IN THE LABORATORY IN ACCORDANCE WITH **ASTM C31 & C39**

Specimen Marking If Any	Date Tested	Age in Days	Time Tested	COMPRESSIVE STRENGTH Maximum Load lbf	COMPRESSIVE STRENGTH Maximum Load lbf per sq.in.	Conformance Indicated?	Type of Fracture & Defects Noted	Tested By
0430910-1	09-17-14	7	09:21	37449	2980		TYPE 5	JAH
0430910-1	09-17-14	7	09:24	37392	2980		TYPE 5	JAH
0430910-1	10-08-14	28	09:09	53466	4250		TYPE 1	JAH
0430910-1	10-08-14	28	09:13	53268	4240		TYPE 4	JAH
0430910-1		HOLD						
	AVERAGE	7			2980			
	AVERAGE	28			4250	YES		

Comments:

Distribution : **MOLTZ CONSTRUCTORS, INC. (1)**

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SAMPLING / TESTING OF PORTLAND CEMENT CONCRETE

Client **MOLTZ CONSTRUCTORS, INC.**
PO BOX 1030
CODY, WY 82414

Date of Report **10-10-14**
Job No. **3154JH043**
Event/Invoice No. **31540164-07**
Authorized By **GARY BORING**
Sampled By **D. SENJEM**
Submitted By **D. SENJEM**

Lab No. **0430912-1**
Date **09-10-14**
Date **09-12-14**
Date **09-17-14**

Client **MOLTZ CONSTRUCTORS, INC.**
Project **CONTINENTAL DAM REHABILITATION PROJECT**
Location **SANTA MARIA IRRIGATION DISTRICT**
Source of Sample **SPILLWAY CHANNEL SLAB, CF-4, STA: 0+98 AT CL**
Architect/Engineer **EDWIN TOMS, P.E.**
Contractor **MOLTZ CONSTRUCTORS, INC.**
Supplier **SOUTHWEST READY MIX**
Truck/Ticket No. **292/5608-5610**
Batch Size **8.0** cubic yards
Time In Mixer **1** hours **31** minutes
Mix Identification **BDP 20%.SM**
Required Strength **4000** psi @ **28** days
Ambient Air Temperature **42** °F
Maximum Size Aggregate **3/4** inches
Water Added Before Sampling **8** gallons
Time Sampled **0902**

FRESHLY MIXED CONCRETE SAMPLED IN ACCORDANCE WITH **ASTM C172**
Deviations: **SAMPLED MIDDLE THIRD OF LOAD BY SINGLE DISCHARGE.**

FRESHLY MIXED CONCRETE TESTED IN ACCORDANCE WITH DESIGNATED SPECIFICATIONS
Unit Weight; **ASTM C138** **140.1** lbf/cu.ft.
Air Content; **ASTM C231** **5.5** %
Temperature: **ASTM C1064** **63** °F
Slump; **ASTM C143** **6** inches
Deviations: **ALL SAMPLE IDENTIFICATION AND FRESH CONCRETE TEST DATA WERE SUBMITTED BY OTHERS.**

CYLINDRICAL CONCRETE SPECIMENS MOLDED & CURED IN THE FIELD IN ACCORDANCE WITH **ASTM C31**
No. of Specimens Molded **5** Diameter/Length **4.00** In.x **8** in. Cross Sectional Area **12.57** sq. in.
Deviations: **SPECIMEN ENVIRONMENT WAS NOT MONITORED BY WT DURING INITIAL CURE.**

CYLINDRICAL CONCRETE SPECIMENS CURED & TESTED IN THE LABORATORY IN ACCORDANCE WITH **ASTM C31 & C39**

Specimen Marking If Any	Date Tested	Age In Days	Time Tested	COMPRESSIVE STRENGTH Maximum Load lbf	lbf per sq.in.	Conformance Indicated?	Type of Fracture & Defects Noted	Tested By
0430912-1	09-19-14	7	10:54	35178	2800		TYPE 3	JAH
0430912-1	09-19-14	7	10:57	35031	2790		TYPE 2	JAH
0430912-1	10-10-14	28	10:34	49310	3920		TYPE 5	JAH
0430912-1	10-10-14	28	10:38	48207	3840		TYPE 1	JAH
0430912-1	12-05-14	84						
	AVERAGE	7			2800			
	AVERAGE	28			3880	NO		

Comments:

Distribution : **MOLTZ CONSTRUCTORS, INC. (1)**

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Since 1955

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Durango, CO 81303
(970) 375-9033

SAMPLING / TESTING OF PORTLAND CEMENT CONCRETE

Client **MOLTZ CONSTRUCTORS, INC.**
PO BOX 1030
CODY, WY 82414

Date of Report **10-27-14**
Job No. **3154JH043**
Event/Invoice No. **31540164-08** Lab No. **0430916-1**
Authorized By **GARY BORING** Date **09-12-14**
Sampled By **D. SENJEM** Date **09-16-14**
Submitted By **D. SENJEM** Date **09-17-14**

Client **MOLTZ CONSTRUCTORS, INC.**
Project **CONTINENTAL DAM REHABILITATION PROJECT**
Location **SANTA MARIA IRRIGATION DISTRICT**
Source of Sample **SPILLWAY CHANNEL WALL, CWR-5, STA: 1+15 RIGHT HALF WAY UP**
Architect/Engineer **EDWIN TOMS, P.E.**
Contractor **MOLTZ CONSTRUCTORS, INC.**
Supplier **SOUTHWEST READY MIX**

Truck/Ticket No. **292/5632,5633,5635** Mix Identification **BDP 20%/SM** Maximum Size Aggregate **3/4** inches
Batch Size **8.0** cubic yards Required Strength **4000** psi @ **28** days Water Added Before Sampling **0** gallons
Time In Mixer **1** hours **7** minutes Ambient Air Temperature **66** °F Time Sampled **1245**

FRESHLY MIXED CONCRETE SAMPLED IN ACCORDANCE WITH **ASTM C172**

Deviations: **SAMPLED MIDDLE THIRD OF LOAD BY SINGLE DISCHARGE.**

FRESHLY MIXED CONCRETE TESTED IN ACCORDANCE WITH DESIGNATED SPECIFICATIONS

Unit Weight; **ASTM C138** **140.3** lbf/cu.ft. Temperature: **ASTM C1064** **71** °F
Air Content; **ASTM C231** **5.9** % Slump; **ASTM C143** **5 1/2** inches
Deviations: **ALL SAMPLE IDENTIFICATION AND FRESH CONCRETE TEST DATA WERE SUBMITTED BY OTHERS.**

CYLINDRICAL CONCRETE SPECIMENS MOLDED & CURED IN THE FIELD IN ACCORDANCE WITH **ASTM C31**

No. of Specimens Molded **5** Diameter/Length **4.00** in.x **8** in. Cross Sectional Area **12.57** sq. in.
Deviations: **SPECIMEN ENVIRONMENT WAS NOT MONITORED BY WT DURING INITIAL CURE.**

CYLINDRICAL CONCRETE SPECIMENS CURED & TESTED IN THE LABORATORY IN ACCORDANCE WITH **ASTM C31 & C39**

Specimen Marking If Any	Date Tested	Age In Days	Time Tested	COMPRESSIVE STRENGTH Maximum Load lbf	lbf per sq.in.	Conformance Indicated?	Type of Fracture & Defects Noted	Tested By
0430916-1	09-23-14	7	09:02	41549	3310		TYPE 2	JAH
0430916-1	09-23-14	7	09:05	39994	3180		TYPE 5	JAH
0430916-1	10-14-14	28	10:17	55799	4440		TYPE 5	MW
0430916-1	10-14-14	28	10:20	54573	4340		TYPE 3	MW
0430916-1		HOLD						
	AVERAGE	7			3250			
	AVERAGE	28			4390	YES		

Comments:

Distribution : **MOLTZ CONSTRUCTORS, INC. (1)**

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SAMPLING / TESTING OF PORTLAND CEMENT CONCRETE

Client **MOLTZ CONSTRUCTORS, INC.**
PO BOX 1030
CODY, WY 82414

Date of Report **10-27-14**
Job No. **3154JH043**
Event/Invoice No. **31540164-09** Lab No. **0430923-1**
Authorized By **GARY BORING** Date **09-22-14**
Sampled By **D. SENJEM** Date **09-23-14**
Submitted By **D. SENJEM** Date **09-25-14**

Client **MOLTZ CONSTRUCTORS, INC.**
Project **CONTINENTAL DAM REHABILITATION PROJECT**
Location **SANTA MARIA IRRIGATION DISTRICT**
Source of Sample **SPILLWAY CHANNEL WALL CWL-5, STA: 1+13 LT, 1/2 WAY UP**
Architect/Engineer **EDWIN TOMS, P.E.**
Contractor **MOLTZ CONSTRUCTORS, INC.**
Supplier **SOUTHWEST READY MIX**
Truck/Ticket No. **182/5708-5711** Mix Identification **BDP 20% SM** Maximum Size Aggregate **3/4** inches
Batch Size **10.0** cubic yards Required Strength **4000** psi @ **28** days Water Added Before Sampling **6** gallons
Time In Mixer **1** hours **32** minutes Ambient Air Temperature **40** °F Time Sampled **0947**

FRESHLY MIXED CONCRETE SAMPLED IN ACCORDANCE WITH **ASTM C172**
Deviations: **SAMPLED MIDDLE THIRD OF LOAD BY SINGLE DISCHARGE.**

FRESHLY MIXED CONCRETE TESTED IN ACCORDANCE WITH DESIGNATED SPECIFICATIONS
Unit Weight; **ASTM C138** **145.8** lbf/cu.ft. Temperature: **ASTM C1064** **64** °F
Air Content; **ASTM C231** **4.3** % Slump; **ASTM C143** **5** inches
Deviations: **ALL SAMPLE IDENTIFICATION AND FRESH CONCRETE TEST DATA WERE SUBMITTED BY OTHERS.**

CYLINDRICAL CONCRETE SPECIMENS MOLDED & CURED IN THE FIELD IN ACCORDANCE WITH **ASTM C31**
No. of Specimens Molded **5** Diameter/Length **4.00** in. x **8** in. Cross Sectional Area **12.57** sq. in.
Deviations: **SPECIMEN ENVIRONMENT WAS NOT MONITORED BY WT DURING INITIAL CURE.**

CYLINDRICAL CONCRETE SPECIMENS CURED & TESTED IN THE LABORATORY IN ACCORDANCE WITH **ASTM C31 & C39**

Specimen Marking If Any	Date Tested	Age In Days	Time Tested	COMPRESSIVE STRENGTH Maximum Load lbf	COMPRESSIVE STRENGTH Maximum Load lbf per sq.in.	Conformance Indicated?	Type of Fracture & Defects Noted	Tested By
0430923-1	09-30-14	7	10:12	48236	3840		TYPE 2	JAH
0430923-1	09-30-14	7	10:15	48320	3840		TYPE 1	JAH
0430923-1	10-21-14	28	10:56	64720	5150		TYPE 5	JAH
0430923-1	10-21-14	28	10:49	65794	5230		TYPE 5	JAH
0430923-1		HOLD						
	AVERAGE	7			3840			
	AVERAGE	28			5190	YES		

Comments:

Distribution : **MOLTZ CONSTRUCTORS, INC. (1)**

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SAMPLING / TESTING OF PORTLAND CEMENT CONCRETE

Client **MOLTZ CONSTRUCTORS, INC.**
PO BOX 1030
CODY, WY 82414

Date of Report **10-27-14**
Job No. **3154JH043**
Event/Invoice No. **31540164-10** Lab No. **0430924-1**
Authorized By **GARY BORING** Date **09-23-14**
Sampled By **D. SENJEM** Date **09-24-14**
Submitted By **D. SENJEM** Date **09-25-14**

Client	**MOLTZ CONSTRUCTORS, INC.**
Project	**CONTINENTAL DAM REHABILITATION PROJECT**
Location	**SANTA MARIA IRRIGATION DISTRICT**
Source of Sample	**SPILLWAY CHANNEL CWR, STA: 2+38 RIGHT AND 1/2 WAY UP**
Architect/Engineer	**EDWIN TOMS, P.E.**
Contractor	**MOLTZ CONSTRUCTORS, INC.**
Supplier	**SOUTHWEST READY MIX**

Truck/Ticket No. **25/5734-5736** Mix Identification **BDP 20% SM** Maximum Size Aggregate **3/4** inches
Batch Size **8.5** cubic yards Required Strength **4000** psi @ **28** days Water Added Before Sampling **10** gallons
Time In Mixer **1** hours **39** minutes Ambient Air Temperature **42** °F Time Sampled **0937**

FRESHLY MIXED CONCRETE SAMPLED IN ACCORDANCE WITH **ASTM C172**
Deviations: **SAMPLED MIDDLE THIRD OF LOAD BY SINGLE DISCHARGE.**

FRESHLY MIXED CONCRETE TESTED IN ACCORDANCE WITH DESIGNATED SPECIFICATIONS

Unit Weight; **ASTM C138** **143.3** lbf/cu.ft. Temperature: **ASTM C1064** **64** °F
Air Content; **ASTM C231** **5.0** % Slump; **ASTM C143** **4 3/4** inches
Deviations: **ALL SAMPLE IDENTIFICATION AND FRESH CONCRETE TEST DATA WERE SUBMITTED BY WTI.**

CYLINDRICAL CONCRETE SPECIMENS MOLDED & CURED IN THE FIELD IN ACCORDANCE WITH **ASTM C31**

No. of Specimens Molded **5** Diameter/Length **4.00** in.x **8** in. Cross Sectional Area **12.57** sq. in.
Deviations: **SPECIMEN ENVIRONMENT WAS NOT MONITORED BY WT DURING INITIAL CURE.**

CYLINDRICAL CONCRETE SPECIMENS CURED & TESTED IN THE LABORATORY IN ACCORDANCE WITH **ASTM C31 & C39**

Specimen Marking If Any	Date Tested	Age In Days	Time Tested	COMPRESSIVE STRENGTH Maximum Load lbf	lbf per sq.in.	Conformance Indicated?	Type of Fracture & Defects Noted	Tested By
0430924-1	**10-01-14**	**7**	**09:57**	**41139**	**3270**		**TYPE 5**	**JAH**
0430924-1	**10-01-14**	**7**	**10:00**	**44814**	**3570**		**TYPE 5**	**JAH**
0430924-1	**10-22-14**	**28**	**11:59**	**65709**	**5230**		**TYPE 5**	**JAH**
0430924-1	**10-22-14**	**28**	**11:49**	**59955**	**4770**		**TYPE 5**	**JAH**
		HOLD						
	AVERAGE	**7**			**3420**			
	AVERAGE	**28**			**5000**	**YES**		

Comments:

Distribution : **MOLTZ CONSTRUCTORS, INC. (1)**

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SAMPLING / TESTING OF PORTLAND CEMENT CONCRETE

Client **MOLTZ CONSTRUCTORS, INC.**
PO BOX 1030
CODY, WY 82414

Date of Report **10-28-14**
Job No. **3154JH043**
Event/Invoice No. **31540164-11** Lab No. **0430927-1**
Authorized By **GARY BORING** Date **09-26-14**
Sampled By **D. SENJEM** Date **09-27-14**
Submitted By **D. SENJEM** Date **10-03-14**

Client **MOLTZ CONSTRUCTORS, INC.**
Project **CONTINENTAL DAM REHABILITATION PROJECT**
Location **SANTA MARIA IRRIGATION DISTRICT**
Source of Sample **SPILLWAY CHANNEL WALL, CWL-11, STA: 2+35 LT. 1/2 WAY UP**
Architect/Engineer **EDWIN TOMS, P.E.**
Contractor **MOLTZ CONSTRUCTORS, INC.**
Supplier **SOUTHWEST READY MIX**
Truck/Ticket No. **18/5758-5760** Mix Identification **BDP 20% SM** Maximum Size Aggregate **3/4** inches
Batch Size **8.5** cubic yards Required Strength **4000** psi @ **28** days Water Added Before Sampling **13** gallons
Time In Mixer **1** hours **38** minutes Ambient Air Temperature **45** °F Time Sampled **0949**

FRESHLY MIXED CONCRETE SAMPLED IN ACCORDANCE WITH **ASTM C172**
Deviations: **SAMPLED MIDDLE THIRD OF LOAD BY SINGLE DISCHARGE.**

FRESHLY MIXED CONCRETE TESTED IN ACCORDANCE WITH DESIGNATED SPECIFICATIONS
Unit Weight; **ASTM C138** **140.3** lbf/cu.ft. Temperature: **ASTM C1064** **66** °F
Air Content; **ASTM C231** **5.6** % Slump; **ASTM C143** **5 1/4** inches
Deviations: **ALL SAMPLE IDENTIFICATION AND FRESH CONCRETE TEST DATA WERE SUBMITTED BY OTHERS.**

CYLINDRICAL CONCRETE SPECIMENS MOLDED & CURED IN THE FIELD IN ACCORDANCE WITH **ASTM C31**
No. of Specimens Molded **5** Diameter/Length **4.00** in. x **8** in. Cross Sectional Area **12.57** sq. in.
Deviations: **SPECIMEN ENVIRONMENT WAS NOT MONITORED BY WT DURING INITIAL CURE.**
SPECIMENS REMAINED IN FIELD MORE THAN 48 HOURS.

CYLINDRICAL CONCRETE SPECIMENS CURED & TESTED IN THE LABORATORY IN ACCORDANCE WITH **ASTM C31 & C39**

Specimen Marking If Any	Date Tested	Age In Days	Time Tested	COMPRESSIVE STRENGTH Maximum Load lbf	lbf per sq.in.	Conformance Indicated?	Type of Fracture & Defects Noted	Tested By
0430927-1	**10-04-14**	**7**	**18:59**	**40177**	**3200**		**TYPE 5**	**DS**
0430927-1	**10-04-14**	**7**	**19:04**	**36276**	**2890**		**TYPE 5**	**DS**
0430927-1	**10-25-14**	**28**	**18:49**	**50483**	**4020**		**TYPE 5**	**DS**
0430927-1	**10-25-14**	**28**	**18:54**	**53862**	**4290**		**TYPE 6**	**DS**
0430927-1		**HOLD**						
	AVERAGE	**7**			**3050**			
	AVERAGE	**28**			**4160**	**YES**		

Comments:

Distribution : **MOLTZ CONSTRUCTORS, INC. (1)**

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SAMPLING / TESTING OF PORTLAND CEMENT CONCRETE

Client **MOLTZ CONSTRUCTORS, INC.**
PO BOX 1030
CODY, WY 82414

Date of Report **10-10-14**
Job No. **3154JH043**
Event/Invoice No. **31540186-01**
Authorized By **GARY BORING**
Sampled By **D. SENJEM**
Submitted By **D. SENJEM**

Lab No. **0431002-1**
Date **10-01-14**
Date **10-02-14**
Date **10-04-14**

Client **MOLTZ CONSTRUCTORS, INC.**
Project **CONTINENTAL DAM REHABILITATION PROJECT**
Location **SANTA MARIA IRRIGATION DISTRICT**
Source of Sample **SPILLWAY CHANNEL WALL, CWR-7, STA: 1+56. RIGHT AND HALF WAY UP**
Architect/Engineer **EDWIN TOMS, P.E.**
Contractor **MOLTZ CONSTRUCTORS, INC.**
Supplier **SOUTH MKWEST READY MIX**

Truck/Ticket No. **292/5807-5809**
Batch Size **7.5** cubic yards
Time In Mixer **1** hours **45** minutes
Mix Identification **BDP 20% SM**
Required Strength **4500** psi @ **28** days
Ambient Air Temperature **39** °F
Maximum Size Aggregate **3/4** inches
Water Added Before Sampling **7** gallons
Time Sampled **1138**

FRESHLY MIXED CONCRETE SAMPLED IN ACCORDANCE WITH **ASTM C172**

Deviations: **SAMPLED MIDDLE THIRD OF LOAD BY SINGLE DISCHARGE.**

FRESHLY MIXED CONCRETE TESTED IN ACCORDANCE WITH DESIGNATED SPECIFICATIONS

Unit Weight; **ASTM C138** **139.3** lbf/cu.ft.
Temperature: **ASTM C1064** **57** °F
Air Content; **ASTM C231** **6.6** %
Slump; **ASTM C143** **4 3/4** inches
Deviations: **ALL SAMPLE IDENTIFICATION AND FRESH CONCRETE TEST DATA WERE SUBMITTED BY OTHERS.**

CYLINDRICAL CONCRETE SPECIMENS MOLDED & CURED IN THE FIELD IN ACCORDANCE WITH **ASTM C31**

No. of Specimens Molded **5**
Diameter/Length **4.00** in.x **8** in.
Cross Sectional Area **12.57** sq. in.
Deviations: **SPECIMEN ENVIRONMENT WAS NOT MONITORED BY WT DURING INITIAL CURE.**

CYLINDRICAL CONCRETE SPECIMENS CURED & TESTED IN THE LABORATORY IN ACCORDANCE WITH **ASTM C31 & C39**

Specimen Marking If Any	Date Tested	Age In Days	Time Tested	COMPRESSIVE STRENGTH Maximum Load lbf	COMPRESSIVE STRENGTH Maximum Load lbf per sq.in.	Conformance Indicated?	Type of Fracture & Defects Noted	Tested By
0431002-1	10-09-14	7	11:26	43316	3450		TYPE 2	JH
0431002-1	10-09-14	7	11:29	43740	3480		TYPE 2	JH
0431002-1	10-30-14	28						
0431002-1	10-30-14	28						
0431002-1		HOLD						
	AVERAGE	7			3470			

Comments:

Distribution : **MOLTZ CONSTRUCTORS, INC. (1)**

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SAMPLING / TESTING OF PORTLAND CEMENT CONCRETE

Client **MOLTZ CONSTRUCTORS, INC.**
PO BOX 1030
CODY, WY 82414

Date of Report **10-27-14**
Job No. **3154JH043**
Event/Invoice No. **31540186-02** Lab No. **0431004-1**
Authorized By **GARY BORING** Date **10-02-14**
Sampled By **D. SENJEM** Date **10-04-14**
Submitted By **D. SENJEM** Date **10-11-14**

Client **MOLTZ CONSTRUCTORS, INC.**
Project **CONTINENTAL DAM REHABILITATION PROJECT**
Location **SANTA MARIA IRRIGATION DISTRICT**
Source of Sample **SPILLWAY CHANNELWALL CWL-7, STA: 1+62 LT, HALF WAY UP**
Architect/Engineer **EDWIN TOMS, P.E.**
Contractor **MOLTZ CONSTRUCTORS, INC.**
Supplier **SOUTHWEST READY MIX**

Truck/Ticket No. **292/5852-5854** Mix Identification **BDP 20% SM** Maximum Size Aggregate **3/4** inches
Batch Size **8.0** cubic yards Required Strength **4000** psi @ **28** days Water Added Before Sampling **5** gallons
Time In Mixer **1** hours **33** minutes Ambient Air Temperature **52** °F Time Sampled **1131**

FRESHLY MIXED CONCRETE SAMPLED IN ACCORDANCE WITH **ASTM C172**
Deviations: **SAMPLED MIDDLE THIRD OF LOAD BY SINGLE DISCHARGE.**

FRESHLY MIXED CONCRETE TESTED IN ACCORDANCE WITH DESIGNATED SPECIFICATIONS
Unit Weight; **ASTM C138** **138.9** lbf/cu.ft. Temperature: **ASTM C1064** **62** °F
Air Content; **ASTM C231** **6.7** % Slump; **ASTM C143** **4 1/2** inches
Deviations: **ALL SAMPLE IDENTIFICATION AND FRESH CONCRETE TEST DATA WERE SUBMITTED BY OTHERS.**

CYLINDRICAL CONCRETE SPECIMENS MOLDED & CURED IN THE FIELD IN ACCORDANCE WITH **ASTM C31**
No. of Specimens Molded **5** Diameter/Length **4.00** in.x **8** in. Cross Sectional Area **12.57** sq. in.
Deviations: **SPECIMEN ENVIRONMENT WAS NOT MONITORED BY WT DURING INITIAL CURE.**

CYLINDRICAL CONCRETE SPECIMENS CURED & TESTED IN THE LABORATORY IN ACCORDANCE WITH **ASTM C31 & C39**

Specimen Marking If Any	Date Tested	Age In Days	Time Tested	COMPRESSIVE STRENGTH Maximum Load lbf	COMPRESSIVE STRENGTH Maximum Load lbf per sq.in.	Conformance Indicated?	Type of Fracture & Defects Noted	Tested By
0431004-1	10-11-14	7	15:32	40700	3240		TYPE 5	DS
0431004-1	10-11-14	7	15:35	40997	3260		TYPE 5	DS
0431004-1	11-01-14	28						
0431004-1	11-01-14	28						
0431004-1		HOLD						
	AVERAGE	7			3250			

Comments:

Distribution : **MOLTZ CONSTRUCTORS, INC. (1)**

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REVIEWED BY **F. HAMPTON**
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10/6/2014

Continental Dam Concrete Compressive Strengths - Required Strength 4000 thru 8/05/14. 4500 PSI required as of 8/06/14 & beyond.

Specimen Marking	Sample Date	Days 3	3	Days 7	7	Days 28	28	Days 56	56	Days 84	
0430616-1	6/16/14			3,200		4,190	4,520				
0430618-1	6/18/14			2,440	2,350	3,340	3,480				
0430620-1	6/20/14			3,260	3,220	4,360	4,400				
0430623-1	6/23/14			2,680	2,640	3,360	3,420			4,190	
0430624-1	6/24/14			2,810	2,790	4,030	3,640	4,380			
0430625-1	6/25/14			2,870	2,820	3,860	3,790	4,540			
0430626-1	6/26/14			2,760	2,650	3,670	3,690	4,390			Typo - corrected from 2670 to 3670
0430627-1	6/27/14			3,070	3,200	4,310	4,250				
0430630-1	6/30/14			3,160	3,130	3,970	3,910				
0430701-1	7/1/14			2,830	2,830	3,690	3,830				
0430702-1	7/2/14			2,970	2,990	4,140	4,130				
0430703-1	7/3/14			2,540	2,610	3,630	3,510	4,170			
0430708-1	7/8/14			2,630	N/A	3,790	3,590	4,190			
0430711-1	7/11/14			3,040	2,900	4,040	4,150				
0430714-1	7/14/14	2,370		2,850	2,750	3,590	3,530				
0430715-1	7/15/14			2,930	3,090	3,800	4,030				
0430716-1	7/16/14			2,300	2,510	3,390	3,390				
0430721-1	7/21/14			2,010	1,860	2,680	2,830				
0430723-1	7/23/14			2,160	2,070	2,980	2,830				
0430725-1	7/25/14			2,520	2,400	3,380	3,240				
0430730-1	7/30/14			2,470	2,510	3,320	3,290				
0430801-1	8/1/14			2,490	2,500	3,530	3,350				
											Regardless of what reports say, pours beyond 8/05/14 required 4500 PSI.
0430806-1	8/6/14			3,340	3,080	4,840	4,690				
0430808-1	8/8/14			2,950	2,930	3,970	4,050				
0430812-1	8/12/14			3,070	3,240						
0430813-1	8/13/14			2,950	2,940						
0430819-1	8/19/14			3,240	2,900	4,160	4,070				
0430821-1	8/21/14			2,760	2,790	3,860	3,300				
0430825-1	8/25/14			3,350	3,570	3,600	4,240				
0430902-1	9/2/14			3,010	2,740	3,590	3,800				
0430903-1	9/3/14			3,310	3,340	4,180	4,640				
0430904-1	9/4/14			3,360	3,410	4,390	4,560				
0430905-1	9/5/14			2,850	2,810	4,100	3,960				
0430910-1	9/10/14			2,980	2,980						
0430912-1	9/12/14			2,800	2,790						
0430916-1	9/16/14			3,310	3,180						
0430923-1	9/23/14			3,840	3,840						
0430924-1	9/24/14			3,270	3,570						
				2,905	2,887	3,798	3,810				

10/6/2014

Continental Dam Concrete Compressive Strengths - Required Strength 3000

Specimen Marking	Sample Date	Days 7	7	Days 28	28	Days 56	56	
0430531-1	5/31/14	1,890		3,010	3,030			
0430531-2	5/31/14	1,820		2,930	2,920	4,000		
0430729-1	7/29/14	1,820		2,130	2,200	2,980	2,830	Report says 4000 PSI required. Should say 3000 PSI required.
0430807-1	8/7/14	1,820	1,700	2,570	2,560			
0430815-1	8/15/14	N/A	1,700	2,370	2,340			

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(970) 375-9033

SAMPLING / TESTING OF PORTLAND CEMENT CONCRETE

Client **MOLTZ CONSTRUCTORS, INC.**
PO BOX 1030
CODY, WY 82414

Date of Report **11-07-14**
Job No. **3154JH043**
Event/Invoice No. **31540186-03** Lab No. **0431010-1**
Authorized By **GARY BORING** Date **10-07-14**
Sampled By **D. SENJEM** Date **10-10-14**
Submitted By **D. SENJEM** Date **10-18-14**

Client	**MOLTZ CONSTRUCTORS, INC.**
Project	**CONTINENTAL DAM REHABILITATION PROJECT**
Location	**SANTA MARIA IRRIGATION DISTRICT**
Source of Sample	**SPILLWAY CHANNEL WALL CWL-10, STA: 2+17, LT**
Architect/Engineer	**EDWIN TOMS, P.E.**
Contractor	**MOLTZ CONSTRUCTORS, INC.**
Supplier	**SOUTHWEST READY MIX**

Truck/Ticket No. **292/5932-5934** Mix Identification **BDP 20%SM** Maximum Size Aggregate **3/4** inches
Batch Size **8.5** cubic yards Required Strength **4000** psi @ **28** days Water Added Before Sampling **8** gallons
Time In Mixer **1** hours **27** minutes Ambient Air Temperature **43** °F Time Sampled **1120**

FRESHLY MIXED CONCRETE SAMPLED IN ACCORDANCE WITH **ASTM C172**

Deviations: **SAMPLED MIDDLE THIRD OF LOAD BY SINGLE DISCHARGE.**

FRESHLY MIXED CONCRETE TESTED IN ACCORDANCE WITH DESIGNATED SPECIFICATIONS

Unit Weight; **ASTM C138** **142.6** lbf/cu.ft. Temperature: **ASTM C1064** **64** °F
Air Content; **ASTM C231** **5.1** % Slump; **ASTM C143** **5 1/4** inches
Deviations: **ALL SAMPLE IDENTIFICATION AND FRESH CONCRETE TEST DATA WERE SUBMITTED BY OTHERS.**

CYLINDRICAL CONCRETE SPECIMENS MOLDED & CURED IN THE FIELD IN ACCORDANCE WITH **ASTM C31**

No. of Specimens Molded **5** Diameter/Length **4.00** in.x **8** in. Cross Sectional Area **12.57** sq. in.
Deviations: **SPECIMEN ENVIRONMENT WAS NOT MONITORED BY WT DURING INITIAL CURE.**

CYLINDRICAL CONCRETE SPECIMENS CURED & TESTED IN THE LABORATORY IN ACCORDANCE WITH **ASTM C31 & C39**

Specimen Marking If Any	Date Tested	Age In Days	Time Tested	COMPRESSIVE STRENGTH Maximum Load lbf	COMPRESSIVE STRENGTH Maximum Load lbf per sq.in.	Conformance Indicated?	Type of Fracture & Defects Noted	Tested By
0431010-1	10-18-14	8	18:31	50384	4010		TYPE 5	DS
0431010-1	10-18-14	8	18:36	48617	3870		TYPE 5	DS
0431010-1	11-07-14	28	09:53	65130	5180		TYPE 5	JAH
0431010-1	11-07-14	28	09:56	67517	5370		TYPE 5	JAH
0431010-1		HOLD						
	AVERAGE	8			3940			
	AVERAGE	28			5280	YES		

Comments:

Distribution : **MOLTZ CONSTRUCTORS, INC. (1)**

THE SERVICES REFERRED TO HEREIN WERE PERFORMED IN ACCORDANCE WITH THE STANDARD OF CARE PRACTICED LOCALLY FOR THE REFERENCED METHOD(S) AND RELATE ONLY TO THE CONDITION(S) OBSERVED OR SAMPLE(S) TESTED AT THE TIME AND PLACE STATED HEREIN. WESTERN TECHNOLOGIES INC. MAKES NO OTHER WARRANTY OR REPRESENTATION EXPRESSED OR IMPLIED, AND HAS NOT CONFIRMED INFORMATION INCLUDING SOURCE OF MATERIALS SUBMITTED BY OTHERS.

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SAMPLING / TESTING OF PORTLAND CEMENT CONCRETE

Client **MOLTZ CONSTRUCTORS, INC.**
PO BOX 1030
CODY, WY 82414

Date of Report **11-17-14**
Job No. **3154JH043**
Event/Invoice No. **31540186-04** Lab No. **0431018-1**
Authorized By **GARY BORING** Date **10-13-14**
Sampled By **D. SENJEM** Date **10-18-14**
Submitted By **D. SENJEM** Date **10-22-14**

Client	**MOLTZ CONSTRUCTORS, INC.**
Project	**CONTINENTAL DAM REHABILITATION PROJECT**
Location	**SANTA MARIA IRRIGATION DISTRICT**
Source of Sample	**MICRO PILE BASE, STATION: 2+55 RIGHT**
Architect/Engineer	**EDWIN TOMS, P.E.**
Contractor	**MOLTZ CONSTRUCTORS, INC.**
Supplier	**SOUTHWEST READY MIX**

Truck/Ticket No. **292/5980-5983** Mix Identification **BDP 20% SM** Maximum Size Aggregate **3/4** inches
Batch Size **10.0** cubic yards Required Strength **4000** psi @ **28** days Water Added Before Sampling **0** gallons
Time In Mixer **1** hours **43** minutes Ambient Air Temperature **57** °F Time Sampled **1044**

FRESHLY MIXED CONCRETE SAMPLED IN ACCORDANCE WITH **ASTM C172**

Deviations: **SAMPLED MIDDLE THIRD OF LOAD BY SINGLE DISCHARGE.**

FRESHLY MIXED CONCRETE TESTED IN ACCORDANCE WITH DESIGNATED SPECIFICATIONS

Unit Weight; **ASTM C138** **142.4** lbf/cu.ft. Temperature: **ASTM C1064** **60** °F
Air Content; **ASTM C231** **5.4** % Slump; **ASTM C143** **3 1/2** inches
Deviations: **ALL SAMPLE IDENTIFICATION AND FRESH CONCRETE TEST DATA WERE SUBMITTED BY OTHERS.**

CYLINDRICAL CONCRETE SPECIMENS MOLDED & CURED IN THE FIELD IN ACCORDANCE WITH **ASTM C31**

No. of Specimens Molded **5** Diameter/Length **4.00** in.x **8** in. Cross Sectional Area **12.57** sq. in.
Deviations: **SPECIMEN ENVIRONMENT WAS NOT MONITORED BY WT DURING INITIAL CURE.**
SPECIMENS REMAINED IN FIELD MORE THAN 48 HOURS.

CYLINDRICAL CONCRETE SPECIMENS CURED & TESTED IN THE LABORATORY IN ACCORDANCE WITH **ASTM C31 & C39**

Specimen Marking If Any	Date Tested	Age In Days	Time Tested	COMPRESSIVE STRENGTH Maximum Load lbf	COMPRESSIVE STRENGTH Maximum Load lbf per sq.in.	Conformance Indicated?	Type of Fracture & Defects Noted	Tested By
0431018-1	**10-25-14**	**7**	**18:34**	**49508**	**3940**		**TYPE 5**	**DS**
0431018-1	**10-25-14**	**7**	**18:37**	**49367**	**3930**		**TYPE 5**	**DS**
0431018-1	**11-15-14**	**28**	**15:08**	**66699**	**5310**		**TYPE 5**	**JH**
0431018-1	**11-15-14**	**28**	**15:12**	**65229**	**5190**		**TYPE 5**	**JH**
0431018-1		**HOLD**						
	AVERAGE	**7**			**3940**			
	AVERAGE	**28**			**5250**	**YES**		

Comments:

Distribution : **MOLTZ CONSTRUCTORS, INC. (1)**

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SAMPLING / TESTING OF PORTLAND CEMENT CONCRETE

Client **MOLTZ CONSTRUCTORS, INC.**
PO BOX 1030
CODY, WY 82414

Date of Report **11-20-14**
Job No. **3154JH043**
Event/Invoice No. **31540186-05** Lab No. **0431021-1**
Authorized By **GARY BORING** Date **10-13-14**
Sampled By **D. SENJEM** Date **10-21-14**
Submitted By **D. SENJEM** Date **10-24-14**

Client	**MOLTZ CONSTRUCTORS, INC.**
Project	**CONTINENTAL DAM REHABILITATION PROJECT**
Location	**SANTA MARIA IRRIGATION DISTRICT**
Source of Sample	**WALL EXTENSION, STA: -0+09 RIGHT (IWR-9)**
Architect/Engineer	**EDWIN TOMS, P.E.**
Contractor	**MOLTZ CONSTRUCTORS, INC.**
Supplier	**SOUTHWEST READY MIX**

Truck/Ticket No. **209/5999-6001** Mix Identification **BDP 20% SM** Maximum Size Aggregate **3/4** inches
Batch Size **9.0** cubic yards Required Strength **4000** psi @ **28** days Water Added Before Sampling **0** gallons
Time In Mixer **1** hours **25** minutes Ambient Air Temperature **47** °F Time Sampled **1322**

FRESHLY MIXED CONCRETE SAMPLED IN ACCORDANCE WITH **ASTM C172**

Deviations: **SAMPLED MIDDLE THIRD OF LOAD BY SINGLE DISCHARGE.**

FRESHLY MIXED CONCRETE TESTED IN ACCORDANCE WITH DESIGNATED SPECIFICATIONS

Unit Weight; **ASTM C138** **143.4** lbf/cu.ft. Temperature: **ASTM C1064** **59** °F
Air Content; **ASTM C231** **4.6** % Slump; **ASTM C143** **3** inches
Deviations: **ALL SAMPLE IDENTIFICATION AND FRESH CONCRETE TEST DATA WERE SUBMITTED BY OTHERS.**

CYLINDRICAL CONCRETE SPECIMENS MOLDED & CURED IN THE FIELD IN ACCORDANCE WITH **ASTM C31**

No. of Specimens Molded **5** Diameter/Length **4.00** in.x **8** in. Cross Sectional Area **12.57** sq. in.
Deviations: **SPECIMEN ENVIRONMENT WAS NOT MONITORED BY WT DURING INITIAL CURE.**
SPECIMENS REMAINED IN FIELD MORE THAN 48 HOURS.

CYLINDRICAL CONCRETE SPECIMENS CURED & TESTED IN THE LABORATORY IN ACCORDANCE WITH **ASTM C31 & C39**

Specimen Marking If Any	Date Tested	Age In Days	Time Tested	COMPRESSIVE STRENGTH Maximum Load lbf	lbf per sq.in.	Conformance Indicated?	Type of Fracture & Defects Noted	Tested By
0431021-1	10-28-14	7	09:48	58344	4640		TYPE 2	JAH
0431021-1	10-28-14	7	09:52	57100	4540		TYPE 5	JAH
0431021-1	11-18-14	28	14:55	72990	5810		TYPE 5	DS
0431021-1	11-18-14	28	15:01	70304	5590		TYPE 5	DS
0431021-1		HOLD						
	AVERAGE	7			4590			
	AVERAGE	28			5700	YES		

Comments:

Distribution : **MOLTZ CONSTRUCTORS, INC. (1)**

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11/24/2014

Continental Dam Concrete Compressive Strengths - Required Strength 4000 thru 8/05/14. 4500 PSI required as of 8/06/14 & beyond.

Specimen Marking	Sample Date	Days 3	3	Days 7	7	Days 28	28	Days 56	56	Days 84	
0430616-1	6/16/14			3,200		4,190	4,520				
0430618-1	6/18/14			2,440	2,350	3,340	3,480			4,370	
0430620-1	6/20/14			3,260	3,220	4,360	4,400				
0430623-1	6/23/14			2,680	2,640	3,360	3,420			4,190	
0430624-1	6/24/14			2,810	2,790	4,030	3,640	4,380			
0430625-1	6/25/14			2,870	2,820	3,860	3,790	4,540			
0430626-1	6/26/14			2,760	2,650	3,670	3,690	4,390			
0430627-1	6/27/14			3,070	3,200	4,310	4,250				
0430630-1	6/30/14			3,160	3,130	3,970	3,910			4,510	72 day break
0430701-1	7/1/14			2,830	2,830	3,690	3,830			4,590	71-day break
0430702-1	7/2/14			2,970	2,990	4,140	4,130				
0430703-1	7/3/14			2,540	2,610	3,630	3,510	4,170			
0430708-1	7/8/14			2,630	N/A	3,790	3,590	4,190			
0430711-1	7/11/14			3,040	2,900	4,040	4,150				
0430714-1	7/14/14	2,370		2,850	2,750	3,590	3,530			4,320	
0430715-1	7/15/14			2,930	3,090	3,800	4,030			4,890	
0430716-1	7/16/14			2,300	2,510	3,390	3,390			4,360	
0430721-1	7/21/14			2,010	1,860	2,680	2,830			3,710	
0430723-1	7/23/14			2,160	2,070	2,980	2,830			3,930	
0430725-1	7/25/14			2,520	2,400	3,380	3,240			4,480	
0430730-1	7/30/14			2,470	2,510	3,320	3,290			4,020	
0430801-1	8/1/14			2,490	2,500	3,530	3,350			3,760	
Regardless of what reports say, pours beyond 8/05/14 required 4500 PSI.											
0430806-1	8/6/14			3,340	3,080	4,840	4,690				
0430808-1	8/8/14			2,950	2,930	3,970	4,050			5180	
0430812-1	8/12/14			3,070	3,240	4,230	4,270				
0430813-1	8/13/14			2,950	2,940	3,570	3,760			4620	
0430819-1	8/19/14			3,240	2,900	4,160	4,070				
0430821-1	8/21/14			2,760	2,790	3,860	3,300			4,180	
0430825-1	8/25/14			3,350	3,570	3,600	4,240				
0430902-1	9/2/14			3,010	2,740	3,590	3,800				
0430903-1	9/3/14			3,310	3,340	4,180	4,640				
0430904-1	9/4/14			3,360	3,410	4,390	4,560				
0430905-1	9/5/14			2,850	2,810	4,100	3,960				
0430910-1	9/10/14			2,980	2,980	4,250	4,240				
0430912-1	9/12/14			2,800	2,790	3,920	3,840				
0430916-1	9/16/14			3,310	3,180	4,440	4,340				
0430923-1	9/23/14			3,840	3,840	5,150	5,230				
0430924-1	9/24/14			3,270	3,570	5,230	4,770				
0430927-1	9/27/14			3,200	2,890	4,020	4,290				
0431002-1	10/2/14			3,450	3,480	4,300	4,360				
0431004-1	10/4/14			3,240	3,260	4,230	4,370				
0431010-1	10/10/14			4,010	3,870	5,180	5,370				
0431018-1	10/18/14			3,940	3,930	5,310	5,190				
0431021-1	10/21/14			4,640	4,540	5,810	5,590				

11/11/2014

Continental Dam Concrete Compressive Strengths - Required Strength 3000

Specimen Marking	Sample Date	Days 7	7	Days 28	28	Days 56	56	Days 84	84	
0430531-1	5/31/14	1,890		3,010	3,030					
0430531-2	5/31/14	1,820		2,930	2,920	4,000		4,000		
0430729-1	7/29/14	1,820		2,130	2,200	2,980	2,830	4,060		Report says 4000 PSI required. Should say 3000 PSI required.
0430807-1	8/7/14	1,820	1,700	2,570	2,560			3,050		
0430815-1	8/15/14	N/A	1,700	2,370	2,340			3130		

Season 2

Summary of Concrete Testing

Client	Moltz Constructors, Inc.	Project Number	15096	Date	07/01/15
Address	PO Box 1030	Project Name	Continental Dam	Report Number	1
	Cody, WY 82414	Project Location	Hinsdale County, CO	Technician	Rich Silkey
Attn:	Thomas P. Moltz	cc:		Weather	Mostly Cloudy, 70°F
				Scheduled Time/By	10:00 by Troy

Concrete & Placement

Concrete Supplier: Center Redi-Mix Mix Design: CDOT Class D/P Placement Location: Chute Key, Approx. STA 2+45

Field Testing

Ticket Number	Time Batched	Time Tested	Cubic Yards Batched	Cubic Yards Placed	Water added on-site (gal)	Slump (inches) Field	Slump (inches) Spec (Max)	Total Air (%) Field	Total Air (%) Spec	Concrete Temperature (°F)	Unit Weight (pcf)	Cylinder Set
34251	7:49	10:30	7.5	7.5	4	**1 3/4**	2-4	**3.5**	4-7	74	NM	N/A
34251	7:49	10:40	7.5	7.5	4 (Total)	2 1/4	2-4	6.0	4-7	76	NM	N/A
34252	8:06	11:06	7.5	15.0	10	NM	2-4	**3.0**	4-7	80	139.2	N/A
34252	8:06	11:36	7.5	15.0	10 (Total)	**1 1/2**	2-4	4.8	4-7	80	136.2	1

Remarks: 25 oz of liquid air entrainment was added to each truck after the initial test. Mix contained DELVO (Retardant). 26 oz of Rheobuild 1000 was added to ticket #34252 after final test. Tests were taken at chute. Test results were given to Troy with Moltz and Joe with AECOM. NM=Not Measured.

Cylinder Compressive Strength Results

Set #	Cylinder Number	Days Aged	Date Tested	Specimen size (inches)	Area (inches^2)	Load (pounds)	Strength (psi) Cylinder	Strength (psi) Spec	Fracture Type
1	1	7	07/08/15	4 X 8	12.57	49,320	3,920		2
1	2	7	07/08/15	4 X 8	12.57	49,890	3,970		2
1	3	14	07/15/15	4 X 8	12.57	57,660	4,590		3
1	4	14	07/15/15	4 X 8	12.57	56,470	4,490		1
1	5	28	07/29/15	4 X 8	12.57	67,900	5,400	4,000	2
1	6	28	07/29/15	4 X 8	12.57	68,110	5,420	4,000	5
1	7	H							

Remarks:

Concrete Cylinder Storage | Field Storage Facility: Cure Box/Outside | Min/Max Temperature (°F): 60/92

Fracture Codes: 1=CONE; 2=CONE/SPLIT; 3=COLUMNAR; 4=SHEAR; 5=SIDE FRACTURE; 6= POINTED SIDE FRACTURE

1537 G Street
Salida, CO 81201
(719)539-2312
Fax(719)530-9111

MOUNTAIN ENGINEERING & TESTING

2035 1/2 Grande Avenue
Monte Vista, CO 81144
(719)628-2069

Summary of Concrete Testing

Client	Moltz Constructors, Inc.	Project Number	15096	Date	07/16/15
Address	PO Box 1030	Project Name	Continental Dam	Report Number	2
	Cody, WY 82414	Project Location	Hinsdale County, CO	Technician	Rich Silkey
Attn:	Thomas P. Moltz	cc:		Weather	Partly Cloudy, 62°F
				Scheduled Time/By	11:00 by Troy

Concrete & Placement

Concrete Supplier: Center Redi-Mix Mix Design: CDOT Class D/P Placement Location: Stilling Basin Backfill Concrete, STA 2+70

Field Testing

Ticket Number	Time Batched	Time Tested	Cubic Yards Batched	Cubic Yards Placed	Water added on-site (gal)	Slump (inches) Field	Slump (inches) Spec (Max)	Total Air (%) Field	Total Air (%) Spec	Concrete Temperature (°F)	Unit Weight (pcf)	Cylinder Set
34361	9:04	11:35	8.0	8.0	0	4	2-4	10.0	0-10	70	128.0	N/A
34361	9:04	11:40	8.0	8.0	0	3 3/4	2-4	9.0	0-10	70	130.0	2
34361	9:04	12:34	8.0	8.0	3	6	8	NM	0-10	70	NM	N/A
34362	9:47	12:36	8.0	16.0	0	2	2-4	9.2	0-10	70	130.0	N/A

Remarks: Mix contained DELVO (Retardant). 2 Gallons of Rheobuild 1000 was added to first truck before 3rd test. Tests were taken at chute. 2.5 gallons of Rheobuild 1000 was added to the second truck after test. Test results were given to Troy with Moltz and Joe with AECOM. NM=Not Measured.

Cylinder Compressive Strength Results

Set #	Cylinder Number	Days Aged	Date Tested	Specimen size (inches)	Area (inches^2)	Load (pounds)	Strength (psi) Cylinder	Strength (psi) Spec	Fracture Type
2	1	7	07/23/15	4 X 8	12.57	35,130	2,790		3
2	2	7	07/23/15	4 X 8	12.57	37,280	2,970		3
2	3	28	08/13/15	4 X 8	12.57	50,750	4,040	3,000	3
2	4	28	08/13/15	4 X 8	12.57	51,830	4,120	3,000	3
2	5	H							

Remarks:

Concrete Cylinder Storage Field Storage Facility: Cure Box Water Bath/Outside Min/Max Temperature (°F): 66/69

Fracture Codes 1=CONE; 2=CONE/SPLIT; 3=COLUMNAR; 4=SHEAR; 5=SIDE FRACTURE; 6= POINTED SIDE FRACTURE

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Summary of Concrete Testing

Client	Moltz Constructors, Inc.	Project Number	15096	Date	07/17/15
Address	PO Box 1030	Project Name	Continental Dam	Report Number	3
	Cody, WY 82414	Project Location	Hinsdale County, CO	Technician	Rich Silkey
Attn:	Thomas P. Moltz	cc:		Weather	Partly Cloudy, 65°F
				Scheduled Time/By	1:45 by Troy

Concrete & Placement

Concrete Supplier: Center Redi-Mix Mix Design: CDOT Class D/P Placement Location: Stilling Basin Backfill Concrete, STA 3+00

Field Testing

Ticket Number	Time Batched	Time Tested	Cubic Yards Batched	Cubic Yards Placed	Water added on-site (gal)	Slump (inches) Field	Slump (inches) Spec (Max)	Total Air (%) Field	Total Air (%) Spec	Concrete Temperature (°F)	Unit Weight (pcf)	Cylinder Set
34376	1:00	3:20	8.0	8.0	8	4	2-4	8.6	0-10	70	130.6	3
34377	1:19	3:50	8.0	16.0	0	1 1/2	2-4	6.3	0-10	NM	134.6	N/A
34377	1:19	4:00	8.0	16.0	15*	4	2-4	5.4	0-10	NM	135.2	N/A

Remarks: Mix contained DELVO (Retardant). 1 gallon of Rheobuild 1000 added to first truck after test. *1 gallon of Rheobuild 1000 added with water. Tests were taken at chute. Kenney with Center Redi-Mix was onsite to calibrate gauge and to perform air tests. The air tests were consistent between testers. Test results were given to Troy with Moltz, Kenny with Center Redi-Mix and Joe with AECOM. NM=Not Measured.

Cylinder Compressive Strength Results

Set #	Cylinder Number	Days Aged	Date Tested	Specimen size (inches)	Area (inches^2)	Load (pounds)	Strength (psi) Cylinder	Strength (psi) Spec	Fracture Type
3	1	7	07/24/15	4 X 8	12.57	36,430	2,900		3
3	2	7	07/24/15	4 X 8	12.57	35,050	2,790		3
3	3	28	08/14/15	4 X 8	12.57	50,090	3,980	3,000	3
3	4	28	08/14/15	4 X 8	12.57	48,920	3,890	3,000	3
3	5	H							

Remarks:

Concrete Cylinder Storage Field Storage Facility: Cure Box Water Bath/Outside Min/Max Temperature (°F): 62/68

Fracture Codes 1=CONE; 2=CONE/SPLIT; 3=COLUMNAR; 4=SHEAR; 5=SIDE FRACTURE; 6= POINTED SIDE FRACTURE

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Summary of Concrete Testing

Client	Moltz Constructors, Inc.	Project Number	15096	Date	07/21/15
Address	PO Box 1030	Project Name	Continental Dam	Report Number	4
	Cody, WY 82414	Project Location	Hinsdale County, CO	Technician	Rich Silkey
Attn:	Thomas P. Moltz	cc:		Weather	Partly Cloudy, 65°F
				Scheduled Time/By	2:00 by Troy/Kenny

Concrete & Placement

Concrete Supplier: Center Redi-Mix Mix Design: CDOT Class D/P Placement Location: Stilling Basin Slope, Backfill Concrete, STA 2+65

Field Testing

Ticket Number	Time Batched	Time Tested	Cubic Yards Batched	Cubic Yards Placed	Water added on-site (gal)	Slump (inches) Field	Slump (inches) Spec (Max)	Total Air (%) Field	Total Air (%) Spec	Concrete Temperature (°F)	Unit Weight (pcf)	Cylinder Set
34396	11:28	1:45	8.0	8.0	8	**4 1/2**	2-4	8.7	0-10	70	130.0	4
34396	11:28	2:15	8.0	8.0	9 (Total)*	NM	2-4	6.5	0-10	NM	NM	NM
34397	11:51	2:05	8.0	16.0	0	3	2-4	8.0	0-10	NM	NM	NM
34398	12:15	2:55	8.0	24.0	0	3 1/2	2-4	8.0	0-10	NM	NM	NM

Remarks: Mix contained DELVO (Retardant). *1 gallon of Rheobuild 1000 added with water. Tests were taken at chute. Test results were given to Troy with Moltz, and Joe with AECOM. It appears that Rheobuild additive lowers the air up to 2%. NM=Not Measured.

Cylinder Compressive Strength Results

Set #	Cylinder Number	Days Aged	Date Tested	Specimen size (inches)	Area (inches^2)	Load (pounds)	Strength (psi) Cylinder	Strength (psi) Spec	Fracture Type
4	1	7	07/28/15	4 X 8	12.57	35,500	2,820		3
4	2	7	07/28/15	4 X 8	12.57	35,620	2,830		3
4	3	28	08/18/15	4 X 8	12.57	48,760	3,880	3,000	1
4	4	28	08/18/15	4 X 8	12.57	50,330	4,000	3,000	4
4	5	H							

Remarks:

Concrete Cylinder Storage Field Storage Facility: Cure Box Water Bath/Outside Min/Max Temperature (°F): 68/70

Fracture Codes 1=CONE; 2=CONE/SPLIT; 3=COLUMNAR; 4=SHEAR; 5=SIDE FRACTURE; 6= POINTED SIDE FRACTURE

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Summary of Concrete Testing

Client	Moltz Constructors, Inc.	Project Number	15096	Date	07/22/15
Address	PO Box 1030	Project Name	Continental Dam	Report Number	5
	Cody, WY 82414	Project Location	Hinsdale County, CO	Technician	Rich Silkey
Attn:	Thomas P. Moltz	cc:		Weather	Sunny, 48°F
				Scheduled Time/By	8:00 by Troy

Concrete & Placement

Concrete Supplier: Center Redi-Mix Mix Design: CDOT Class D/P Placement Location: Stilling Basin, Backfill Concrete, STA 3+15

Field Testing

Ticket Number	Time Batched	Time Tested	Cubic Yards Batched	Cubic Yards Placed	Water added on-site (gal)	Slump (inches) Field	Slump (inches) Spec (Max)	Total Air (%) Field	Total Air (%) Spec	Concrete Temperature (°F)	Unit Weight (pcf)	Cylinder Set
34401	5:51	8:15	8.0	8.0	0	2 1/2	2-4	6.7	0-10	62	135.6	N/A
34402	6:19	8:30	8.0	16.0	0	1 1/2	2-4	4.9	0-10	62	137.0	N/A
34402	6:19	8:50	8.0	16.0	15	3	2-4	5.8	0-10	62	135.6	5
34403	6:51	9:00	8.0	24.0	0	1	2-4	2.3	0-10	NM	NM	NM

Remarks: Mix contained DELVO (Retardant). 1 gallon of Rheobuild 1000 added after tests. Tests were taken at chute. Test results were given to Troy with Moltz, and Joe with AECOM. NM=Not Measured. Testing slump and air on the first three trucks from this point on with one set of cylinders, was requested by Joe with AECOM.

Cylinder Compressive Strength Results

Set #	Cylinder Number	Days Aged	Date Tested	Specimen size (inches)	Area (inches^2)	Load (pounds)	Strength (psi) Cylinder	Strength (psi) Spec	Fracture Type
5	1	7	07/29/15	4 X 8	12.57	50,010	3,980		2
5	2	7	07/29/15	4 X 8	12.57	50,070	3,980		2
5	3	28	08/19/15	4 X 8	12.57	65,320	5,200	3,000	5
5	4	28	08/19/15	4 X 8	12.57	65,580	5,220	3,000	3
5	5	H							

Remarks:

Concrete Cylinder Storage Field Storage Facility: Cure Box Water Bath/Outside Min/Max Temperature (°F): 62-68

Fracture Codes 1=CONE; 2=CONE/SPLIT; 3=COLUMNAR; 4=SHEAR; 5=SIDE FRACTURE; 6= POINTED SIDE FRACTURE

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Summary of Concrete Testing

Client	Moltz Constructors, Inc.	Project Number	15096	Date	07/23/15
Address	PO Box 1030	Project Name	Continental Dam	Report Number	6
	Cody, WY 82414	Project Location	Hinsdale County, CO	Technician	Rich Silkey
Attn:	Thomas P. Moltz	cc:		Weather	Sunny, 65°F
				Scheduled Time/By	12:00 by Center RM

Concrete & Placement

Concrete Supplier: Center Redi-Mix Mix Design: CDOT Class D/P Placement Location: Stilling Basin Slope, Backfill Concrete, STA 2+55

Field Testing

Ticket Number	Time Batched	Time Tested	Cubic Yards Batched	Cubic Yards Placed	Water added on-site (gal)	Slump (inches) Field	Slump (inches) Spec (Max)	Total Air (%) Field	Total Air (%) Spec	Concrete Temperature (°F)	Unit Weight (pcf)	Cylinder Set
34408	10:20	12:40	8.0	8.0	0	2	2-4	3.6	0-10	73	138.7	N/A
34408	10:20	12:50	8.0	8.0	12	3 1/2	2-4	NM	0-10	NM	NM	N/A
34409	10:48	1:20	8.0	16.0	4	2 1/2	2-4	3.5	0-10	73	138.0	6
34410	11:15	2:00	8.0	24.0	0	1 1/2	2-4	3.1	0-10	73	139.0	N/A
34410	11:15	2:10	8.0	24.0	8	2 1/2	2-4	NM	0-10	NM	NM	N/A

Remarks: Mix contained DELVO (Retardant). No Rheobuild 1000 added to mix this day. Tests were taken at chute. Test results were given to Troy with Moltz, and Joe with AECOM. NM=Not Measured.

Cylinder Compressive Strength Results

Set #	Cylinder Number	Days Aged	Date Tested	Specimen size (inches)	Area (inches^2)	Load (pounds)	Strength (psi) Cylinder	Strength (psi) Spec	Fracture Type
6	1	7	07/30/15	4 X 8	12.57	53,590	4,260		2
6	2	7	07/30/15	4 X 8	12.57	50,920	4,050		2
6	3	28	08/20/15	4 X 8	12.57	69,640	5,540	3,000	5
6	4	28	08/20/15	4 X 8	12.57	70,750	5,630	3,000	1
6	5	H							

Remarks:

Concrete Cylinder Storage Field Storage Facility: Cure Box Water Bath/Outside Min/Max Temperature (°F): 72-78

Fracture Codes 1=CONE; 2=CONE/SPLIT; 3=COLUMNAR; 4=SHEAR; 5=SIDE FRACTURE; 6= POINTED SIDE FRACTURE

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Summary of Concrete Testing

Client	Moltz Constructors, Inc.	Project Number	15096	Date	07/24/15
Address	PO Box 1030	Project Name	Continental Dam	Report Number	7
	Cody, WY 82414	Project Location	Hinsdale County, CO	Technician	Rich Silkey
Attn:	Thomas P. Moltz	cc:		Weather	Cloudy, 55°F
				Scheduled Time/By	8:00 by Troy

Concrete & Placement

Concrete Supplier: Center Redi-Mix Mix Design: CDOT Class D/P Placement Location: Stilling Basin, Backfill Concrete, STA 3+40

Field Testing

Ticket Number	Time Batched	Time Tested	Cubic Yards Batched	Cubic Yards Placed	Water added on-site (gal)	Slump (inches) Field	Slump (inches) Spec (Max)	Total Air (%) Field	Total Air (%) Spec	Concrete Temperature (°F)	Unit Weight (pcf)	Cylinder Set
34413	5:55	8:15	8.0	8.0	0	2	2-4	4.2	0-10	65	137.8	N/A
34413	5:55	8:20	8.0	8.0	16	3 1/2	2-4	NM	0-10	NM	NM	N/A
34414	6:23	8:45	8.0	16.0	0	1 1/2	2-4	3.3	0-10	65	138.8	N/A
34414	6:23	8:50	8.0	16.0	16	3	2-4	3.7	0-10	68	NM	7
34415	6:53	9:10	8.0	24.0	16	3	2-4	4.0	0-10	65	138.0	N/A

Remarks: Mix contained DELVO (Retardant). No Rheobuild 1000 added to mix this day. Tests were taken at chute. Test results were given to Troy with Moltz. NM=Not Measured.

Cylinder Compressive Strength Results

Set #	Cylinder Number	Days Aged	Date Tested	Specimen size (inches)	Area (inches^2)	Load (pounds)	Strength (psi) Cylinder	Strength (psi) Spec	Fracture Type
7	1	7	07/31/15	4 X 8	12.57	52,170	4,150		3
7	2	7	07/31/15	4 X 8	12.57	56,770	4,520		2
7	3	28	08/21/15	4 X 8	12.57	69,890	5,560	3,000	2
7	4	28	08/21/15	4 X 8	12.57	72,380	5,760	3,000	3
7	5	H							

Remarks:

Concrete Cylinder Storage Field Storage Facility: Cure Box Water Bath/Outside Min/Max Temperature (°F): 58/67

Fracture Codes 1=CONE; 2=CONE/SPLIT; 3=COLUMNAR; 4=SHEAR; 5=SIDE FRACTURE; 6= POINTED SIDE FRACTURE

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Summary of Concrete Testing

Client	Moltz Constructors, Inc.	Project Number	15096	Date	08/05/15
Address	PO Box 1030	Project Name	Continental Dam	Report Number	8
	Cody, WY 82414	Project Location	Hinsdale County, CO	Technician	Rich Silkey
Attn:	Thomas P. Moltz	cc:		Weather	Partly Cloudy, 70's
				Scheduled Time/By	12:30 by Moltz

Concrete & Placement

Concrete Supplier: Center Redi-Mix Mix Design: CDOT Class D/P Placement Location: SBF3

Field Testing

Ticket Number	Time Batched	Time Tested	Cubic Yards Batched	Cubic Yards Placed	Water added on-site (gal)	Slump (inches) Field	Slump (inches) Spec (Max)	Total Air (%) Field	Total Air (%) Spec	Concrete Temperature (°F)	Unit Weight (pcf)	Cylinder Set
34480	11:02	1:20	8.0	8.0	0	2	2-4	4.9	4-7	73	137.4	N/A
34480	11:20	2:00	8.0	8.0	0[1]	NM	2-4	3.5	4-7	NM	NM	N/A
34481	11:31	2:15	8.0	16.0	0	**1 3/4**	2-4	4.4	4-7	75	137.2	8
34481	11:31	2:30	8.0	16.0	0[2]	NM	2-4	5.4	4-7	NM	NM	N/A
34481	11:31	2:35	8.0	16.0	0[3]	NM	2-4	5.8	4-7	NM	NM	N/A
34482	11:58	3:00	8.0	24.0	0	2 1/4	2-4	4.3	4-7	73	NM	N/A

Remarks: Mix contained DELVO (Retardant). Tests were taken at chute. [1]1 Gallon of Rheobuild 1000 was added and then air test was performed. Mix lost 1.4% air with addition of Rheobuild. [2]20 oz of AE90 was added to the mix with 1 gallon of Rheobuild 1000. Air test was sampled at the chute. [3]Air test was sampled after line pumped at point of placement. Air was increased by .4%. Test results were given to Joe with AECOM and Jason with Moltz. NM=Not Measured.

Cylinder Compressive Strength Results

Set #	Cylinder Number	Days Aged	Date Tested	Specimen size (inches)	Area (inches^2)	Load (pounds)	Strength (psi) Cylinder	Strength (psi) Spec	Fracture Type
8	1	7	08/12/15	4 X 8	12.57	50,440	4,010		2
8	2	7	08/12/15	4 X 8	12.57	54,350	4,320		2
8	3	28	09/02/15	4 X 8	12.57	71,120	5,660	4,000	1
8	4	28	09/02/15	4 X 8	12.57	67,030	5,330	4,000	5
8	5	H							

Remarks:

Concrete Cylinder Storage Field Storage Facility: Cure Box Water Bath/Outside Min/Max Temperature (°F): 76

Fracture Codes 1=CONE; 2=CONE/SPLIT; 3=COLUMNAR; 4=SHEAR; 5=SIDE FRACTURE; 6= POINTED SIDE FRACTURE

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Summary of Concrete Testing

Client	Moltz Constructors, Inc.	Project Number	15096	Date	08/06/15
Address	PO Box 1030	Project Name	Continental Dam	Report Number	9
	Cody, WY 82414	Project Location	Hinsdale County, CO	Technician	Rich Silkey
Attn:	Thomas P. Moltz	cc:		Weather	Clear, 76°F
				Scheduled Time/By	1:30 by Moltz

Concrete & Placement

Concrete Supplier: Center Redi-Mix Mix Design: CDOT Class D/P Placement Location: SBF1

Field Testing

Ticket Number	Time Batched	Time Tested	Cubic Yards Batched	Cubic Yards Placed	Water added on-site (gal)	Slump (inches) Field	Slump (inches) Spec (Max)	Total Air (%) Field	Total Air (%) Spec	Concrete Temperature (°F)	Unit Weight (pcf)	Cylinder Set
34485	11:55	2:15	8.0	8.0	0	**1 1/2**	2-4	5.0	4-7	76	NM	N/A
34486	12:18	2:45	8.0	16.0	0	**1 1/2**	2-4	5.0	4-7	76	137.0	9

Remarks: Mix contained DELVO (Retardant). Tests were taken at chute. 1/2 Gallon of Rheobuild 1000 was added after tests. Test results were given to Joe with AECOM and Jason with Moltz. NM=Not Measured.

Cylinder Compressive Strength Results

Set #	Cylinder Number	Days Aged	Date Tested	Specimen size (inches)	Area (inches^2)	Load (pounds)	Strength (psi) Cylinder	Strength (psi) Spec	Fracture Type
9	1	7	08/13/15	4 X 8	12.57	49,380	3,930		3
9	2	7	08/13/15	4 X 8	12.57	54,920	4,370		3
9	3	28	09/03/15	4 X 8	12.57	68,350	5,440	4,000	2
9	4	28	09/03/15	4 X 8	12.57	69,750	5,550	4,000	1
9	5	H							

Remarks:

Concrete Cylinder Storage Field Storage Facility: Cure Box Water Bath/Outside Min/Max Temperature (°F): 72/78

Fracture Codes 1=CONE; 2=CONE/SPLIT; 3=COLUMNAR; 4=SHEAR; 5=SIDE FRACTURE; 6= POINTED SIDE FRACTURE

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Summary of Concrete Testing

Client	Moltz Constructors, Inc.	Project Number	15096	Date	08/07/15
Address	PO Box 1030	Project Name	Continental Dam	Report Number	10
	Cody, WY 82414	Project Location	Hinsdale County, CO	Technician	Rich Silkey
Attn:	Thomas P. Moltz	cc:		Weather	Overcast, 69°F
				Scheduled Time/By	3:00 by Moltz

Concrete & Placement

Concrete Supplier: Center Redi-Mix Mix Design: CDOT Class D/P Placement Location: SBF5

Field Testing

Ticket Number	Time Batched	Time Tested	Cubic Yards Batched	Cubic Yards Placed	Water added on-site (gal)	Slump (inches) Field	Slump (inches) Spec (Max)	Total Air (%) Field	Total Air (%) Spec	Concrete Temperature (°F)	Unit Weight (pcf)	Cylinder Set
34496	12:42	3:00	8.0	8.0	0	3 1/4	2-4	5.2	4-7	71	136.4	N/A
34497	1:18	3:30	8.0	16.0	0	**6**	2-4	7.0	4-7	69	132.2	N/A
34497	1:18	3:45	8.0	16.0	0	**5[1]**	2-4	7.0	4-7	74	132.4	10
34497	1:18	3:45	8.0	16.0	0	**5[2]**	2-4	NM	4-7	NM	NM	N/A
34498	1:40	4:10	8.0	24.0	0	4	2-4	7.0	4-7	73	132.6	N/A

Remarks: Mix contained DELVO (Retardant). Tests were taken at chute. [1]Test was taken from chute after spinning the drum for 5 minutes. [2]Test was taken from the end of the pump hose. No Rheobuild 1000 added after tests. Test results were given to Joe with AECOM and Jason with Moltz. NM=Not Measured.

Cylinder Compressive Strength Results

Set #	Cylinder Number	Days Aged	Date Tested	Specimen size (inches)	Area (inches^2)	Load (pounds)	Strength (psi) Cylinder	Strength (psi) Spec	Fracture Type
10	1	7	08/14/15	4 X 8	12.57	41,130	3,270		3
10	2	7	08/14/15	4 X 8	12.57	39,190	3,120		3
10	3	28	09/04/15	4 X 8	12.57	58,760	4,670	4,000	2
10	4	28	09/04/15	4 X 8	12.57	56,730	4,510	4,000	2
10	5	H							

Remarks:

Concrete Cylinder Storage Field Storage Facility: Cure Box Water Bath/Outside Min/Max Temperature (°F): 57/62

Fracture Codes 1=CONE; 2=CONE/SPLIT; 3=COLUMNAR; 4=SHEAR; 5=SIDE FRACTURE; 6= POINTED SIDE FRACTURE

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Summary of Concrete Testing

Client	Moltz Constructors, Inc.	Project Number	15096	Date	08/10/15
Address	PO Box 1030	Project Name	Continental Dam	Report Number	11
	Cody, WY 82414	Project Location	Hinsdale County, CO	Technician	Rich Silkey
Attn:	Thomas P. Moltz	cc:		Weather	Overcast, 70°F
				Scheduled Time/By	1:00 by Moltz

Concrete & Placement

Concrete Supplier: Center Redi-Mix Mix Design: CDOT Class D/P Placement Location: SBF2

Field Testing

Ticket Number	Time Batched	Time Tested	Cubic Yards Batched	Cubic Yards Placed	Water added on-site (gal)	Slump (inches) Field	Slump (inches) Spec (Max)	Total Air (%) Field	Total Air (%) Spec	Concrete Temperature (°F)	Unit Weight (pcf)	Cylinder Set
34505	12:00	2:20	8.0	8.0	0	3	2-4	5.5	4-7	74	136.0	N/A
34506	12:28	3:20	8.0	16.0	0	**1 1/4**	2-4	4.1	4-7	73	138.0	N/A
34506	12:28	3:30	8.0	16.0	10	2	2-4	4.6	4-7	74	137.0	11
34507	1:00	4:15	8.0	24.0	10	**1 1/2**	2-4	**3.8**	4-7	75	138.0	N/A
34507	1:00	4:20	8.0	24.0	18(Total)[1]	2 3/4	2-4	5.8	4-7	75	134.4	N/A
34508	1:30	4:40	8.0	32.0	11[2]	2 1/2	2-4	4.7	4-7	NM	NM	N/A

Remarks: Mix contained DELVO (Retardant). Tests were taken at chute. [1]1/2 gallon of Rheobuild 1000 and 20 oz of AE90 were also added. [2]1/2 gallon of Rheobuild 1000 and 10 oz of AE90 were also added. No Rheobuild 1000 added to other tests. Test results were given to Joe with AECOM and Jason with Moltz. NM=Not Measured.

Cylinder Compressive Strength Results

Set #	Cylinder Number	Days Aged	Date Tested	Specimen size (inches)	Area (inches^2)	Load (pounds)	Strength (psi) Cylinder	Strength (psi) Spec	Fracture Type
11	1	7	08/17/15	4 X 8	12.57	47,380	3,770		2
11	2	7	08/17/15	4 X 8	12.57	48,120	3,830		2
11	3	28	09/07/15	4 X 8	12.57	59,430	4,730	4,000	5
11	4	28	09/07/15	4 X 8	12.57	59,040	4,700	4,000	5
11	5	H							

Remarks:

Concrete Cylinder Storage Field Storage Facility: Cure Box Water Bath/Outside Min/Max Temperature (°F): 64/76

Fracture Codes 1=CONE; 2=CONE/SPLIT; 3=COLUMNAR; 4=SHEAR; 5=SIDE FRACTURE; 6= POINTED SIDE FRACTURE

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Summary of Concrete Testing

Client	Moltz Constructors, Inc.	Project Number	15096	Date	08/11/15
Address	PO Box 1030	Project Name	Continental Dam	Report Number	12
	Cody, WY 82414	Project Location	Hinsdale County, CO	Technician	Rich Silkey
Attn:	Thomas P. Moltz	cc:		Weather	Overcast, 64°F
				Scheduled Time/By	12:00 by Moltz

Concrete & Placement

Concrete Supplier: Center Redi-Mix Mix Design: CDOT Class D/P Placement Location: SBF7

Field Testing

Ticket Number	Time Batched	Time Tested	Cubic Yards Batched	Cubic Yards Placed	Water added on-site (gal)	Slump (inches) Field	Slump (inches) Spec (Max)	Total Air (%) Field	Total Air (%) Spec	Concrete Temperature (°F)	Unit Weight (pcf)	Cylinder Set
34509	9:53	12:05	7.0	7.0	0	3 1/4	2-4	5.7	4-7	70	135.4	N/A
34510	10:45	12:55	7.0	14.0	0	3	2-4	5.5	4-7	70	136.0	12
34511	11:17	1:30	7.0	21.0	0	4	2-4	6.4	4-7	70	134.6	N/A

Remarks: Mix contained DELVO (Retardant). Tests were taken at chute. No Rheobuild 1000 added after tests. Test results were given to Joe with AECOM and Jason with Moltz. NM=Not Measured.

Cylinder Compressive Strength Results

Set #	Cylinder Number	Days Aged	Date Tested	Specimen size (inches)	Area (inches^2)	Load (pounds)	Strength (psi) Cylinder	Strength (psi) Spec	Fracture Type
12	1	7	08/18/15	4 X 8	12.57	45,460	3,620		3
12	2	7	08/18/15	4 X 8	12.57	49,800	3,960		5
12	3	28	09/08/15	4 X 8	12.57	64,050	5,100	4,000	5
12	4	28	09/08/15	4 X 8	12.57	62,120	4,940	4,000	5
12	5	H							

Remarks:

Concrete Cylinder Storage Field Storage Facility: Cure Box Water Bath/Outside Min/Max Temperature (°F): 60/80

Fracture Codes 1=CONE; 2=CONE/SPLIT; 3=COLUMNAR; 4=SHEAR; 5=SIDE FRACTURE; 6= POINTED SIDE FRACTURE

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Summary of Concrete Testing

Client	Moltz Constructors, Inc.	Project Number	15096	Date	08/12/15
Address	PO Box 1030	Project Name	Continental Dam	Report Number	13
	Cody, WY 82414	Project Location	Hinsdale County, CO	Technician	Rich Silkey
Attn:	Thomas P. Moltz	cc:		Weather	Mostly Cloudy, 70°F
				Scheduled Time/By	12:00 by Moltz

Concrete & Placement

Concrete Supplier: Center Redi-Mix Mix Design: CDOT Class D/P Placement Location: SBF4

Field Testing

Ticket Number	Time Batched	Time Tested	Cubic Yards Batched	Cubic Yards Placed	Water added on-site (gal)	Slump (inches) Field	Slump (inches) Spec (Max)	Total Air (%) Field	Total Air (%) Spec	Concrete Temperature (°F)	Unit Weight (pcf)	Cylinder Set
34517	11:19	1:30	8.0	8.0	0	**1**	2-4	**3.8**	4-7	73	138.8	N/A
34517	11:19	1:40	8.0	8.0	16[1]	4	2-4	7.0	4-7	73	NM	N/A
34518	12:07	2:20	8.0	16.0	0	**1 1/2**	2-4	**3.8**	4-7	74	138.8	N/A
34518	12:07	2:30	8.0	16.0	12[2]	2 1/2	2-4	6.0	4-7	74	135.4	N/A
34519	12:42	3:10	8.0	24.0	0	**1 1/2**	2-4	**3.8**	4-7	78	138.8	N/A
34519	12:42	3:20	8.0	24.0	0[3]	2 1/2	2-4	4.7	4-7	78	137.8	N/A
34520	1:15	4:00	8.0	32.0	0[4]	**1 1/2**	2-4	4.4	4-7	80	138.2	13

Remarks: Mix contained DELVO (Retardant). Tests were taken at chute. [1]10 oz of liquid air was added with water. [2]12 oz of liquid air and 1/2 gallon of Rheobuild 1000 were added with water. [3]10 oz of liquid air and 1 gallon of Rheobuild 1000 were added. [4]10 oz of liquid air and 1/2 gallon of Rheobuild 1000 were added before test and then 2 more gallons of Rheobuild 1000 were added after test. Joe with AECOM stated to not exceed a water/cement ratio of .42, per mix design. Tickert #34517 and #34518 were the bottom lift. Test results were given to Joe with AECOM and Jason with Moltz. NM=Not Measured.

Cylinder Compressive Strength Results

Set #	Cylinder Number	Days Aged	Date Tested	Specimen size (inches)	Area (inches^2)	Load (pounds)	Strength (psi) Cylinder	Strength (psi) Spec	Fracture Type
13	1	7	08/19/15	4 X 8	12.57	55,410	4,410		5
13	2	7	08/19/15	4 X 8	12.57	56,210	4,470		3
13	3	28	09/09/15	4 X 8	12.57	73,350	5,840	4,000	2
13	4	28	09/09/15	4 X 8	12.57	75,380	6,000	4,000	2
13	5	H							

Remarks:

Concrete Cylinder Storage Field Storage Facility: Cure Box Water Bath/Outside Min/Max Temperature (°F): 64/70

Fracture Codes: 1=CONE; 2=CONE/SPLIT; 3=COLUMNAR; 4=SHEAR; 5=SIDE FRACTURE; 6= POINTED SIDE FRACTURE

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Summary of Concrete Testing

Client	Moltz Constructors, Inc.	Project Number	15096	Date	08/13/15
Address	PO Box 1030	Project Name	Continental Dam	Report Number	14
	Cody, WY 82414	Project Location	Hinsdale County, CO	Technician	Rich Silkey
Attn:	Thomas P. Moltz	cc:		Weather	Overcast, 68°F
				Scheduled Time/By	1:00 by Moltz

Concrete & Placement

Concrete Supplier: Center Redi-Mix Mix Design: CDOT Class D/P Placement Location: SBF6

Field Testing

Ticket Number	Time Batched	Time Tested	Cubic Yards Batched	Cubic Yards Placed	Water added on-site (gal)	Slump (inches) Field	Slump (inches) Spec (Max)	Total Air (%) Field	Total Air (%) Spec	Concrete Temperature (°F)	Unit Weight (pcf)	Cylinder Set
34525	11:14	1:25	8.0	8.0	0[1]	2 3/4	2-4	5.0	4-7	74	137.2	N/A
34526	11:58	2:10	8.0	16.0	0	3 1/4	2-4	5.5	4-7	73	135.8	N/A
34526	11:58	2:20	8.0	16.0	0[2]	3 1/2	8	5.1	4-7	73	136.4	N/A
34527	12:27	2:40	8.0	24.0	0	2 1/4	2-4	4.8	4-7	70	137.2	14
34527	12:27	2:55	8.0	24.0	0[3]	4 1/4	8	4.5	4-7	70	NM	N/A

Remarks: Mix contained DELVO (Retardant). Tests were taken at chute. [1]3/4 gallon of Rheobuild 1000 was added after test. [2]1/2 gallon of Rheobuild 1000 was added before test. [3]1 gallon of Rheobuild 1000 was added before test. Test results were given to Joe with AECOM and Jason with Moltz. NM=Not Measured.

Cylinder Compressive Strength Results

Set #	Cylinder Number	Days Aged	Date Tested	Specimen size (inches)	Area (inches^2)	Load (pounds)	Strength (psi) Cylinder	Strength (psi) Spec	Fracture Type
14	1	7	08/20/15	4 X 8	12.57	52,760	4,200		5
14	2	7	08/20/15	4 X 8	12.57	55,020	4,380		5
14	3	28	09/10/15	4 X 8	12.57	72,920	5,800	4,000	2
14	4	28	09/10/15	4 X 8	12.57	69,740	5,550	4,000	2
14	5	H							

Remarks:

Concrete Cylinder Storage Field Storage Facility: Cure Box Water Bath/Outside Min/Max Temperature (°F): 63/70

Fracture Codes 1=CONE; 2=CONE/SPLIT; 3=COLUMNAR; 4=SHEAR; 5=SIDE FRACTURE; 6= POINTED SIDE FRACTURE

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Summary of Concrete Testing

Client	Moltz Constructors, Inc.	Project Number	15096	Date	08/14/15
Address	PO Box 1030	Project Name	Continental Dam	Report Number	15
	Cody, WY 82414	Project Location	Hinsdale County, CO	Technician	Rich Silkey
Attn:	Thomas P. Moltz	cc:		Weather	Overcast, 61°F
				Scheduled Time/By	12:30 by Moltz

Concrete & Placement

Concrete Supplier: Center Redi-Mix Mix Design: CDOT Class D/P Placement Location: SBF8

Field Testing

Ticket Number	Time Batched	Time Tested	Cubic Yards Batched	Cubic Yards Placed	Water added on-site (gal)	Slump (inches) Field	Slump (inches) Spec (Max)	Total Air (%) Field	Total Air (%) Spec	Concrete Temperature (°F)	Unit Weight (pcf)	Cylinder Set
34536	10:17	12:40	7.5	7.5	0	2 3/4	2-4	5.2	4-7	71	136.8	N/A
34537	10:58	1:20	7.5	15.0	0[1]	2 1/2	2-4	5.3	4-7	72	136.4	N/A
34537	10:58	1:30	7.5	15.0	0	4 1/4	8	NM	4-7	NM	NM	N/A
34538	11:25	1:50	7.5	22.5	0[2]	2	2-4	5.3	4-7	72	136.4	15

Remarks: Mix contained DELVO (Retardant). Tests were taken at chute. [1]1 gallon of Rheobuild 1000 was added after test. [2]1 gallon of Rheobuild 1000 was added after test. Test results were given to Joe with AECOM and Jason with Moltz. NM=Not Measured.

Cylinder Compressive Strength Results

Set #	Cylinder Number	Days Aged	Date Tested	Specimen size (inches)	Area ($inches^2$)	Load (pounds)	Strength (psi) Cylinder	Strength (psi) Spec	Fracture Type
15	1	7	08/21/15	4 X 8	12.57	55,100	4,380		5
15	2	7	08/21/15	4 X 8	12.57	50,900	4,050		3
15	3	28	09/11/15	4 X 8	12.57	68,450	5,450	4,000	2
15	4	28	09/11/15	4 X 8	12.57	69,130	5,500	4,000	1
15	5	H							

Remarks:

Concrete Cylinder Storage Field Storage Facility: Cure Box Water Bath/Outside Min/Max Temperature (°F): 60/64

Fracture Codes 1=CONE; 2=CONE/SPLIT; 3=COLUMNAR; 4=SHEAR; 5=SIDE FRACTURE; 6= POINTED SIDE FRACTURE

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Summary of Concrete Testing

Client	Moltz Constructors, Inc.	Project Number	15096	Date	08/17/15
Address	PO Box 1030	Project Name	Continental Dam	Report Number	16
	Cody, WY 82414	Project Location	Hinsdale County, CO	Technician	Rich Silkey
Attn:	Thomas P. Moltz	cc:		Weather	Overcast, 62°F
				Scheduled Time/By	1:30 by Moltz

Concrete & Placement

Concrete Supplier: Center Redi-Mix Mix Design: CDOT Class D/P Placement Location: SBWL 1

Field Testing

Ticket Number	Time Batched	Time Tested	Cubic Yards Batched	Cubic Yards Placed	Water added on-site (gal)	Slump (inches) Field	Slump (inches) Spec (Max)	Total Air (%) Field	Total Air (%) Spec	Concrete Temperature (°F)	Unit Weight (pcf)	Cylinder Set
34544	11:19	1:30	8.0	8.0	0[1]	2	2-4	4.3	4-7	73	137.8	N/A
34545	12:18	2:30	8.0	16.0	0[2]	**1 3/4**	2-4	4.3	4-7	73	137.8	N/A
34546	12:46	3:20	8.0	24.0	0[3]	**1 1/2**	2-4	**3.6**	4-7	73	NM	N/A
34546	12:46	3:30	8.0	24.0	0	2 3/4	2-4	4.7	4-7	75	137.0	16

Remarks: Mix contained DELVO (Retardant). Tests were taken at chute. [1]1 gallon of Rheobuild 1000 was added after test. [2]1 gallon of Rheobuild 1000 was added after test. [3]1 gallon of Rheobuild 1000 and 10 oz of AE90 were added after test. Test results were given to Joe with AECOM and Jason with Moltz. NM=Not Measured.

Cylinder Compressive Strength Results

Set #	Cylinder Number	Days Aged	Date Tested	Specimen size (inches)	Area ($inches^2$)	Load (pounds)	Strength (psi) Cylinder	Strength (psi) Spec	Fracture Type
16	1	7	08/24/15	4 X 8	12.57	57,210	4,550		5
16	2	7	08/24/15	4 X 8	12.57	55,250	4,400		2
16	3	28	09/14/15	4 X 8	12.57	72,120	5,740	4,000	2
16	4	28	09/14/15	4 X 8	12.57	71,030	5,650	4,000	2
16	5	H							

Remarks:

Concrete Cylinder Storage Field Storage Facility: Cure Box Water Bath/Outside Min/Max Temperature (°F): 60/64

Fracture Codes 1=CONE; 2=CONE/SPLIT; 3=COLUMNAR; 4=SHEAR; 5=SIDE FRACTURE; 6= POINTED SIDE FRACTURE

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Summary of Concrete Testing

Client	Moltz Constructors, Inc.	Project Number	15096	Date	08/18/15
Address	PO Box 1030	Project Name	Continental Dam	Report Number	17
	Cody, WY 82414	Project Location	Hinsdale County, CO	Technician	Rich Silkey
Attn:	Thomas P. Moltz	cc:		Weather	Clear, 69°F
				Scheduled Time/By	12:30 by Moltz

Concrete & Placement

Concrete Supplier: Center Redi-Mix Mix Design: CDOT Class D/P Placement Location: SBWR 1

Field Testing

Ticket Number	Time Batched	Time Tested	Cubic Yards Batched	Cubic Yards Placed	Water added on-site (gal)	Slump (inches) Field	Slump (inches) Spec (Max)	Total Air (%) Field	Total Air (%) Spec	Concrete Temperature (°F)	Unit Weight (pcf)	Cylinder Set
34550	10:46	1:10	8.0	8.0	0[1]	2	2-4	4.4	4-7	74	137.4	N/A
34551	11:31	2:00	8.0	16.0	0[2]	**1 1/2**	2-4	4.0	4-7	74	138.4	N/A
34552	11:56	2:41	8.0	24.0	0[3]	**1 1/4**	2-4	**3.8**	4-7	74	138.4	N/A
34552	11:56	2:50	8.0	24.0	0	4 1/2	8	5.8	4-7	74	135.8	17

Remarks: Mix contained DELVO (Retardant). Tests were taken at chute. [1]1.5 gallon of Rheobuild 1000 was added after test. [2]1 gallon of Rheobuild 1000 were added after test with 10 oz of AE90. [3]1.5 gallon of Rheobuild 1000 and 10 oz of AE90 were added after test. Test results were given to Joe with AECOM and Jason with Moltz. NM=Not Measured.

Cylinder Compressive Strength Results

Set #	Cylinder Number	Days Aged	Date Tested	Specimen size (inches)	Area ($inches^2$)	Load (pounds)	Strength (psi) Cylinder	Strength (psi) Spec	Fracture Type
17	1	7	08/25/15	4 X 8	12.57	47,780	3,800		5
17	2	7	08/25/15	4 X 8	12.57	48,440	3,850		5
17	3	28	09/15/15	4 X 8	12.57	62,870	5,000	4,000	2
17	4	28	09/15/15	4 X 8	12.57	63,550	5,060	4,000	2
17	5	H							

Remarks:

Concrete Cylinder Storage Field Storage Facility: Cure Box Water Bath/Outside Min/Max Temperature (°F): 60/63

Fracture Codes 1=CONE; 2=CONE/SPLIT; 3=COLUMNAR; 4=SHEAR; 5=SIDE FRACTURE; 6= POINTED SIDE FRACTURE

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Summary of Concrete Testing

Client	Moltz Constructors, Inc.	Project Number	15096	Date	08/19/15
Address	PO Box 1030	Project Name	Continental Dam	Report Number	18
	Cody, WY 82414	Project Location	Hinsdale County, CO	Technician	Rich Silkey
Attn:	Thomas P. Moltz	cc:		Weather	Clear, 70°F
				Scheduled Time/By	12:00 by Moltz

Concrete & Placement

Concrete Supplier: Center Redi-Mix Mix Design: CDOT Class D/P Placement Location: SBWL 3

Field Testing

Ticket Number	Time Batched	Time Tested	Cubic Yards Batched	Cubic Yards Placed	Water added on-site (gal)	Slump (inches) Field	Slump (inches) Spec (Max)	Total Air (%) Field	Total Air (%) Spec	Concrete Temperature (°F)	Unit Weight (pcf)	Cylinder Set
34558	10:04	12:15	7.0	7.0	0[1]	2 1/4	2-4	5.3	4-7	73	136.8	N/A
34559	10:47	1:15	7.0	14.0	0[2]	**1 1/2**	2-4	4.3	4-7	70	138.0	N/A
34560	11:18	1:50	7.0	21.0	0[3]	2	2-4	5.1	4-7	72	136.8	18

Remarks: Mix contained DELVO (Retardant). Tests were taken at chute. [1]1.5 gallon of Rheobuild 1000 was added after test. [2]1 gallon of Rheobuild 1000 were added after test with 10 oz of AE90. [3]1 gallon of Rheobuild 1000 was added after test. Test results were given to Joe with AECOM and Jason with Moltz. NM=Not Measured.

Cylinder Compressive Strength Results

Set #	Cylinder Number	Days Aged	Date Tested	Specimen size (inches)	Area (inches^2)	Load (pounds)	Strength (psi) Cylinder	Strength (psi) Spec	Fracture Type
18	1	7	08/26/15	4 X 8	12.57	51,470	4,090		3
18	2	7	08/26/15	4 X 8	12.57	51,200	4,070		3
18	3	28	09/16/15	4 X 8	12.57	67,550	5,370	4,000	2
18	4	28	09/16/15	4 X 8	12.57	70,780	5,630	4,000	3
18	5	H							

Remarks:

Concrete Cylinder Storage Field Storage Facility: Cure Box Water Bath/Outside Min/Max Temperature (°F): 60/65

Fracture Codes 1=CONE; 2=CONE/SPLIT; 3=COLUMNAR; 4=SHEAR; 5=SIDE FRACTURE; 6= POINTED SIDE FRACTURE

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Summary of Concrete Testing

Client	Moltz Constructors, Inc.	Project Number	15096	Date	08/20/15
Address	PO Box 1030	Project Name	Continental Dam	Report Number	19
	Cody, WY 82414	Project Location	Hinsdale County, CO	Technician	Rich Silkey
Attn:	Thomas P. Moltz	cc:		Weather	Clear, 67°F
				Scheduled Time/By	1:45 by Moltz

Concrete & Placement

Concrete Supplier: Center Redi-Mix Mix Design: CDOT Class D/P Placement Location: SBWR 3

Field Testing

Ticket Number	Time Batched	Time Tested	Cubic Yards Batched	Cubic Yards Placed	Water added on-site (gal)	Slump (inches) Field	Slump (inches) Spec (Max)	Total Air (%) Field	Total Air (%) Spec	Concrete Temperature (°F)	Unit Weight (pcf)	Cylinder Set
34567	11:49	2:10	7.0	7.0	0[1]	**1 3/4**	2-4	4.7	4-7	74	137.8	N/A
34568	12:54	3:10	7.0	14.0	0	3 1/2	2-4	5.5	4-7	72	135.2	N/A
34569	1:33	3:40	7.0	21.0	0	3	2-4	5.2	4-7	72	135.6	19

Remarks: Mix contained DELVO (Retardant). Tests were taken at chute. [1]5 quarts of Rheobuild 1000 was added after test. Test results were given to Joe with AECOM and Jason with Moltz. NM=Not Measured.

Cylinder Compressive Strength Results

Set #	Cylinder Number	Days Aged	Date Tested	Specimen size (inches)	Area (inches^2)	Load (pounds)	Strength (psi) Cylinder	Strength (psi) Spec	Fracture Type
19	1	7	08/27/15	4 X 8	12.57	51,200	4,070		3
19	2	7	08/27/15	4 X 8	12.57	50,190	3,990		5
19	3	28	09/17/15	4 X 8	12.57	69,070	5,490	4,000	5
19	4	28	09/17/15	4 X 8	12.57	70,409	5,600	4,000	2
19	5	H							

Remarks:

Concrete Cylinder Storage Field Storage Facility: Cure Box Water Bath/Outside Min/Max Temperature (°F): 60/64

Fracture Codes 1=CONE; 2=CONE/SPLIT; 3=COLUMNAR; 4=SHEAR; 5=SIDE FRACTURE; 6= POINTED SIDE FRACTURE

1537 G Street
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MOUNTAIN
ENGINEERING & TESTING

2035 1/2 Grande Avenue
Monte Vista, CO 81144
(719)628-2069

Summary of Concrete Testing

Client	Moltz Constructors, Inc.	Project Number	15096	Date	08/21/15
Address	PO Box 1030	Project Name	Continental Dam	Report Number	20
	Cody, WY 82414	Project Location	Hinsdale County, CO	Technician	Rich Silkey
Attn:	Thomas P. Moltz	cc:		Weather	Partly Cloudy, 67°F
				Scheduled Time/By	12:45 by Moltz

Concrete & Placement

Concrete Supplier: Center Redi-Mix Mix Design: CDOT Class D/P Placement Location: SBWL 2

Field Testing

Ticket Number	Time Batched	Time Tested	Cubic Yards Batched	Cubic Yards Placed	Water added on-site (gal)	Slump (inches) Field	Slump (inches) Spec (Max)	Total Air (%) Field	Total Air (%) Spec	Concrete Temperature (°F)	Unit Weight (pcf)	Cylinder Set
34576	10:51	1:10	8.0	8.0	0[1]	2 1/4	2-4	4.5	4-7	73	137.6	N/A
34577	11:33	2:00	8.0	16.0	0[2]	**1 1/4**	2-4	**3.8**	4-7	NM	NM	N/A
34577	11:33	2:15	8.0	16.0	0	4	2-4	5.2	4-7	73	136.6	N/A
34578	12:01	2:50	8.0	24.0	0[3]	**1 1/4**	2-4	**3.7**	4-7	76	NM	N/A
34578	12:01	3:00	8.0	24.0	0	2 1/2	2-4	4.2	4-7	76	137.8	20

Remarks: Mix contained DELVO (Retardant). Tests were taken at chute. [1]1 gallon of Rheobuild 1000 was added after test. [2]1.25 gallons of Rheobuild 1000 and 10 oz of AE90 were added after test. [3]1 gallon of Rheobuild 1000 and 10 oz of AE90 were added after test. Test results were given to Joe with AECOM and Jason with Moltz. NM=Not Measured.

Cylinder Compressive Strength Results

Set #	Cylinder Number	Days Aged	Date Tested	Specimen size (inches)	Area ($inches^2$)	Load (pounds)	Strength (psi) Cylinder	Strength (psi) Spec	Fracture Type
20	1	7	08/28/15	4 X 8	12.57	52,260	4,160		5
20	2	7	08/28/15	4 X 8	12.57	50,380	4,010		3
20	3	28	09/18/15	4 X 8	12.57	69,160	5,500	4,000	3
20	4	28	09/18/15	4 X 8	12.57	65,960	5,250	4,000	2
20	5	H							

Remarks:

Concrete Cylinder Storage Field Storage Facility: Cure Box Water Bath/Outside Min/Max Temperature (°F): 50/80

Fracture Codes 1=CONE; 2=CONE/SPLIT; 3=COLUMNAR; 4=SHEAR; 5=SIDE FRACTURE; 6= POINTED SIDE FRACTURE

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Summary of Concrete Testing

Client	Moltz Constructors, Inc.	Project Number	15096	Date	08/24/15
Address	PO Box 1030	Project Name	Continental Dam	Report Number	21
	Cody, WY 82414	Project Location	Hinsdale County, CO	Technician	Rich Silkey
Attn:	Thomas P. Moltz	cc:		Weather	Clear, 67°F
				Scheduled Time/By	12:30 by Moltz

Concrete & Placement

Concrete Supplier: Center Redi-Mix Mix Design: CDOT Class D/P Placement Location: SBWR 2

Field Testing

Ticket Number	Time Batched	Time Tested	Cubic Yards Batched	Cubic Yards Placed	Water added on-site (gal)	Slump (inches) Field	Slump (inches) Spec (Max)	Total Air (%) Field	Total Air (%) Spec	Concrete Temperature (°F)	Unit Weight (pcf)	Cylinder Set
34582	10:18	12:40	8.0	8.0	0[1]	2	2-4	4.6	4-7	71	137.4	N/A
34584	11:17	1:30	8.0	16.0	0[2]	**1 3/4**	2-4	4.1	4-7	73	138.2	N/A
34585	11:45	2:10	8.0	24.0	0[3]	**1 1/2**	2-4	**3.8**	4-7	73	138.6	N/A
34585	11:45	2:20	8.0	24.0	0	4 1/2	8	5.0	4-7	73	137.2	21

Remarks: Mix contained DELVO (Retardant). Tests were taken at chute. [1]1 gallon of Rheobuild 1000 was added after test. [2]1.5 gallons of Rheobuild 1000 and 10 oz of AE90 were added after test. [3]1.5 gallons of Rheobuild 1000 and 10 oz of AE90 were added after test. Test results were given to Joe with AECOM and Jason with Moltz. NM=Not Measured.

Cylinder Compressive Strength Results

Set #	Cylinder Number	Days Aged	Date Tested	Specimen size (inches)	Area ($inches^2$)	Load (pounds)	Strength (psi) Cylinder	Strength (psi) Spec	Fracture Type
21	1	7	08/31/15	4 X 8	12.57	48,310	3,840		5
21	2	7	08/31/15	4 X 8	12.57	46,830	3,730		5
21	3	28	09/21/15	4 X 8	12.57	63,790	5,070	4,000	2
21	4	28	09/21/15	4 X 8	12.57	63,110	5,020	4,000	3
21	5	H							

Remarks:

Concrete Cylinder Storage Field Storage Facility: Cure Box Water Bath/Outside Min/Max Temperature (°F): 44/80

Fracture Codes 1=CONE; 2=CONE/SPLIT; 3=COLUMNAR; 4=SHEAR; 5=SIDE FRACTURE; 6= POINTED SIDE FRACTURE

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Summary of Concrete Testing

Client	Moltz Constructors, Inc.	Project Number	15096	Date	08/26/15
Address	PO Box 1030	Project Name	Continental Dam	Report Number	22
	Cody, WY 82414	Project Location	Hinsdale County, CO	Technician	Rich Silkey
Attn:	Thomas P. Moltz	cc:		Weather	Rain, 50°F
				Scheduled Time/By	1:45 by Moltz

Concrete & Placement

Concrete Supplier: Center Redi-Mix Mix Design: CDOT Class D/P Placement Location: SBWL4 & SBWR4

Field Testing

Ticket Number	Time Batched	Time Tested	Cubic Yards Batched	Cubic Yards Placed	Water added on-site (gal)	Slump (inches) Field	Slump (inches) Spec (Max)	Total Air (%) Field	Total Air (%) Spec	Concrete Temperature (°F)	Unit Weight (pcf)	Cylinder Set
34597	11:29	1:50	8.0	8.0	0[1]	2 1/2	2-4	5.9	4-7	70	135.8	N/A
34598	12:14	3:00	8.0	16.0	0[2]	2	2-4	4.6	4-7	71	137.6	N/A
34599	12:40	3:40	8.0	24.0	0[3]	2	2-4	5.1	4-7	71	136.4	22

Remarks: Mix contained DELVO (Retardant). Tests were taken at chute. [1]1 gallon of Rheobuild 1000 was added after test. [2]1 gallon of Rheobuild 1000 was added after test. [3]1 gallon of Rheobuild 1000 was added after test. Test results were given to Joe with AECOM and Jason with Moltz. NM=Not Measured.

Cylinder Compressive Strength Results

Set #	Cylinder Number	Days Aged	Date Tested	Specimen size (inches)	Area (inches^2)	Load (pounds)	Strength (psi) Cylinder	Strength (psi) Spec	Fracture Type
22	1	7	09/02/15	4 X 8	12.57	53,070	4,220		2
22	2	7	09/02/15	4 X 8	12.57	52,260	4,160		5
22	3	28	09/23/15	4 X 8	12.57	70,380	5,600	4,000	3
22	4	28	09/23/15	4 X 8	12.57	72,670	5,780	4,000	5
22	5	H							

Remarks:

Concrete Cylinder Storage Field Storage Facility: Cure Box Water Bath/Outside Min/Max Temperature (°F): 50/62

Fracture Codes 1=CONE; 2=CONE/SPLIT; 3=COLUMNAR; 4=SHEAR; 5=SIDE FRACTURE; 6= POINTED SIDE FRACTURE

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Summary of Concrete Testing

Client	Moltz Constructors, Inc.	Project Number	15096	Date	08/28/15
Address	PO Box 1030	Project Name	Continental Dam	Report Number	23
	Cody, WY 82414	Project Location	Hinsdale County, CO	Technician	Rich Silkey
Attn:	Thomas P. Moltz	cc:		Weather	Rain, 50°F
				Scheduled Time/By	1:45 by Moltz

Concrete & Placement

Concrete Supplier: Center Redi-Mix Mix Design: CDOT Class D/P Placement Location: SBWL6 & SBWR6

Field Testing

Ticket Number	Time Batched	Time Tested	Cubic Yards Batched	Cubic Yards Placed	Water added on-site (gal)	Slump (inches) Field	Slump (inches) Spec (Max)	Total Air (%) Field	Total Air (%) Spec	Concrete Temperature (°F)	Unit Weight (pcf)	Cylinder Set
34610	11:40	1:50	7.0	7.0	0[1]	2 3/4	2-4	5.2	4-7	73	136.4	N/A
34611	12:18	2:50	7.0	14.0	0[2]	2	2-4	4.9	4-7	74	137.0	N/A
34612	12:40	3:30	7.0	21.0	0[3]	**1 1/2**	2-4	4.0	4-7	74	137.6	N/A
34612	12:40	3:40	7.0	21.0	0	3	8	5.5	4-7	74	135.4	23

Remarks: Mix contained DELVO (Retardant). Tests were taken at chute. [1]1.5 gallons of Rheobuild 1000 was added after test. [2]1.5 gallon of Rheobuild 1000 was added after test. [3]1 gallon of Rheobuild 1000 and 10 oz of AE90 were added after test. Test results were given to Joe with AECOM and Jason with Moltz. NM=Not Measured.

Cylinder Compressive Strength Results

Set #	Cylinder Number	Days Aged	Date Tested	Specimen size (inches)	Area (inches^2)	Load (pounds)	Strength (psi) Cylinder	Strength (psi) Spec	Fracture Type
23	1	7	09/04/15	4 X 8	12.57	43,830	3,490		2
23	2	7	09/04/15	4 X 8	12.57	45,300	3,600		3
23	3	28	09/25/15	4 X 8	12.57	65,690	5,230	4,000	2
23	4	28	09/25/15	4 X 8	12.57	64,230	5,110	4,000	2
23	5	H							

Remarks: Cylinders were picked up on 9/2 per contractor's request.

Concrete Cylinder Storage Field Storage Facility: Blanketed Cure Box /Outside Min/Max Temperature (°F): 58/62

Fracture Codes: 1=CONE; 2=CONE/SPLIT; 3=COLUMNAR; 4=SHEAR; 5=SIDE FRACTURE; 6= POINTED SIDE FRACTURE

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Summary of Concrete Testing

Client	Moltz Constructors, Inc.	Project Number	15096	Date	09/02/15
Address	PO Box 1030	Project Name	Continental Dam	Report Number	24
	Cody, WY 82414	Project Location	Hinsdale County, CO	Technician	Rich Silkey
Attn:	Thomas P. Moltz	cc:		Weather	Overcast, 66°F
				Scheduled Time/By	2:00 by Moltz

Concrete & Placement

Concrete Supplier: Center Redi-Mix Mix Design: CDOT Class D/P Placement Location: SBWL5 & SBWR5

Field Testing

Ticket Number	Time Batched	Time Tested	Cubic Yards Batched	Cubic Yards Placed	Water added on-site (gal)	Slump (inches) Field	Slump (inches) Spec (Max)	Total Air (%) Field	Total Air (%) Spec	Concrete Temperature (°F)	Unit Weight (pcf)	Cylinder Set
34646	11:58	2:10	8.0	8.0	0	**1 3/4**	2-4	5.4	4-7	71	136.0	N/A
34647	12:42	3:05	8.0	16.0	0	**1 3/4**	2-4	5.6	4-7	71	136.0	24

Remarks: Mix contained DELVO (Retardant). Tests were taken at chute. 1 gallon of Rheobuild 1000 was added after tests. Test results were given to Joe with AECOM and Jason with Moltz. NM=Not Measured.

Cylinder Compressive Strength Results

Set #	Cylinder Number	Days Aged	Date Tested	Specimen size (inches)	Area (inches^2)	Load (pounds)	Strength (psi) Cylinder	Strength (psi) Spec	Fracture Type
24	1	7	09/09/15	4 X 8	12.57	51,170	4,070		2
24	2	7	09/09/15	4 X 8	12.57	52,140	4,150		2
24	3	28	09/30/15	4 X 8	12.57	68,490	5,450	4,000	2
24	4	28	09/30/15	4 X 8	12.57	69,300	5,510	4,000	2
24	5	H							

Remarks:

Concrete Cylinder Storage Field Storage Facility: Blanketed Cure Box /Outside Min/Max Temperature (°F): 58/66

Fracture Codes 1=CONE; 2=CONE/SPLIT; 3=COLUMNAR; 4=SHEAR; 5=SIDE FRACTURE; 6= POINTED SIDE FRACTURE

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Summary of Concrete Testing

Client	Moltz Constructors, Inc.	Project Number	15096	Date	09/04/15
Address	PO Box 1030	Project Name	Continental Dam	Report Number	25
	Cody, WY 82414	Project Location	Hinsdale County, CO	Technician	Greg Snyder
Attn:	Thomas P. Moltz	cc:		Weather	Lt. Rain/50
				Scheduled Time/By	1:30 by Center Conc.

Concrete & Placement

Concrete Supplier: Center Redi-Mix Mix Design: CDOT Class D/P Placement Location: SBWL 7

Field Testing

Ticket Number	Time Batched	Time Tested	Cubic Yards Batched	Cubic Yards Placed	Water added on-site (gal)	Slump (inches) Field	Slump (inches) Spec (Max)	Total Air (%) Field	Total Air (%) Spec	Concrete Temperature (°F)	Unit Weight (pcf)	Cylinder Set
34669	11:16	1:55	8.0	8.0	0	3	2-4	6.2	4-7	66	135.2	N/A
34670	12:07	2:47	8.0	16.0	0	3	2-4	5.5	4-7	65	136.0	25
34671	1:54	3:10	8.0	24.0	0	4	2-4	6.2	4-7	65	134.8	N/A

Remarks: Mix contained DELVO (Retardant). Tests were taken at chute. No additives added to any trucks on this date. Test results were given to Joe with AECOM. NM=Not Measured.

Cylinder Compressive Strength Results

Set #	Cylinder Number	Days Aged	Date Tested	Specimen size (inches)	Area (inches^2)	Load (pounds)	Strength (psi) Cylinder	Strength (psi) Spec	Fracture Type
25	1	7	09/11/15	4 X 8	12.57	39,970	3,180		5
25	2	7	09/11/15	4 X 8	12.57	38,560	3,070		5
25	3	28	10/02/15	4 X 8	12.57	61,360	4,880	4,000	5
25	4	28	10/02/15	4 X 8	12.57	62,180	4,950	4,000	2
25	5	H							

Remarks: Concrete Cylinders were picked up on 9/10, per contractor's request.

Concrete Cylinder Storage Field Storage Facility: Blanketed Cure Box/Outside Min/Max Temperature (°F): 42/76

Fracture Codes 1=CONE; 2=CONE/SPLIT; 3=COLUMNAR; 4=SHEAR; 5=SIDE FRACTURE; 6= POINTED SIDE FRACTURE

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Summary of Concrete Testing

Client	Moltz Constructors, Inc.	Project Number	15096	Date	09/10/15
Address	PO Box 1030	Project Name	Continental Dam	Report Number	26
	Cody, WY 82414	Project Location	Hinsdale County, CO	Technician	Rich Silkey
Attn:	Thomas P. Moltz	cc:		Weather	Sunny, 75°F
				Scheduled Time/By	2:00 by Moltz

Concrete & Placement

Concrete Supplier: Center Redi-Mix Mix Design: CDOT Class D/P Placement Location: SBWR 7

Field Testing

Ticket Number	Time Batched	Time Tested	Cubic Yards Batched	Cubic Yards Placed	Water added on-site (gal)	Slump (inches) Field	Slump (inches) Spec (Max)	Total Air (%) Field	Total Air (%) Spec	Concrete Temperature (°F)	Unit Weight (pcf)	Cylinder Set
34705	12:01	2:15	8.0	8.0	0[1]	2	2-4	4.3	4-7	72	137.6	N/A
34706	12:50	3:10	8.0	16.0	0[2]	2 1/2	2-4	4.9	4-7	72	NM	N/A
34707	1:37	4:15	8.0	24.0	0[3]	2 3/4	2-4	5.5	4-7	73	136.0	26

Remarks: Mix contained DELVO (Retardant). Tests were taken at chute. [1]1 gallon of Rheobuild 1000 and 10 oz of AE90 were added after test. [2]1/2 gallon of Rheobuild 1000 added after test. [3]1/2 gallon of Rheobuild 1000 added after test. Test results were given to Joe with AECOM and Jason with Moltz. NM=Not Measured.

Cylinder Compressive Strength Results

Set #	Cylinder Number	Days Aged	Date Tested	Specimen size (inches)	Area ($inches^2$)	Load (pounds)	Strength (psi) Cylinder	Strength (psi) Spec	Fracture Type
26	1	7	09/17/15	4 X 8	12.57	42,410	3,370		3
26	2	7	09/17/15	4 X 8	12.57	41,120	3,270		2
26	3	28	10/08/15	4 X 8	12.57	61,100	4,860	4,000	5
26	4	28	10/08/15	4 X 8	12.57	64,150	5,100	4,000	2
26	5	H							

Remarks: Cylinders were picked up on 9/15 per contractor's request.

Concrete Cylinder Storage Field Storage Facility: Blanketed Cure Box/Outside Min/Max Temperature (°F): 42/76

Fracture Codes 1=CONE; 2=CONE/SPLIT; 3=COLUMNAR; 4=SHEAR; 5=SIDE FRACTURE; 6= POINTED SIDE FRACTURE

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Summary of Concrete Testing

Client	Moltz Constructors, Inc.	Project Number	15096	Date	09/15/15
Address	PO Box 1030	Project Name	Continental Dam	Report Number	27
	Cody, WY 82414	Project Location	Hinsdale County, CO	Technician	Rich Silkey
Attn:	Thomas P. Moltz	cc:		Weather	Partly Cloudy, 66°F
				Scheduled Time/By	1:00 by Moltz

Concrete & Placement

Concrete Supplier: Center Redi-Mix Mix Design: CDOT Class D/P Placement Location: Right Wall Repair, Small Chute Blocks

Field Testing

Ticket Number	Time Batched	Time Tested	Cubic Yards Batched	Cubic Yards Placed	Water added on-site (gal)	Slump (inches) Field	Slump (inches) Spec (Max)	Total Air (%) Field	Total Air (%) Spec	Concrete Temperature (°F)	Unit Weight (pcf)	Cylinder Set
34744	10:43	1:10	5.0	5.0	0[1]	3 1/2	2-4	4.6	4-7	69	137.2	N/A
34743	11:24	2:00	5.0	10.0	0[2]	1	2-4	3.5	4-7	69	139.2	N/A
34743	11:24	2:20	5.0	10.0	0[3]	2 3/4	2-4	5.6	4-7	69	135.6	27

Remarks: Mix contained DELVO (Retardant). Tests were taken at chute. [1]1/2 gallon of Rheobuild 1000 was added before test. [2]1 gallon of Rheobuild 1000 and 10 oz of AE90 were added after test. [3]1/2 gallon of Rheobuild 1000 added after test. Test results were given to Joe with AECOM and Jason with Moltz. NM=Not Measured.

Cylinder Compressive Strength Results

Set #	Cylinder Number	Days Aged	Date Tested	Specimen size (inches)	Area (inches^2)	Load (pounds)	Strength (psi) Cylinder	Strength (psi) Spec	Fracture Type
27	1	7	09/22/15	4 X 8	12.57	47,820	3,800		2
27	2	7	09/22/15	4 X 8	12.57	47,750	3,800		6
27	3	28	10/13/15	4 X 8	12.57	67,100	5,340	4,000	2
27	4	28	10/13/15	4 X 8	12.57	63,210	5,030	4,000	3
27	5	H							

Remarks:

Concrete Cylinder Storage Field Storage Facility: Blanketed Cure Box/Outside Min/Max Temperature (°F):

Fracture Codes: 1=CONE; 2=CONE/SPLIT; 3=COLUMNAR; 4=SHEAR; 5=SIDE FRACTURE; 6= POINTED SIDE FRACTURE

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Center Redi Mix Inc.
P.O. Box 608
1504 W. Hwy 112
Center CO 81125
719-754-2744

Ticket No. 34744

Moltz Constructors Inc.
P.O. Box 1030
Cody WY 82414

Continental Dam Project
Creede West Hwy 149 past Clear
Creek past mi mark 48
Left Rd 513 5 mi to job site

Today 5.00 yd

10:37:20a 5.00 yd 736.50 yd 33JV

09/15/15 1 Ken Smith 3.00 in 5.00

5.00	4500PSI LH	7 Sack Class DP Concrete	736.50	117.75	588.75
00	DELIVERY	Delivery Charge	736.50	72.00	360.00

SubTotal $	948.75
Tax 2.900	17.07
Total $	965.82

10:43:01a

Order Total 140675.18

Ticket No. 34744

Batch size 5.00 yd

-Material-	-Indication-	- AVDP EQU -	- Targets --	-% Tol-	WatFree	%Moist
3\4 AGG	8020 lb	8020 lb	8040 lb	-0.2	-200.5	0.00
SAND	3520 lb	3520 lb	3260 lb	8.0*	285.4	11.54
SAND3	3220 lb	3220 lb	3200 lb	0.6	210.6	9.67
I-II	2665 lb	2665 lb	2640 lb	0.9		
FLYASH	665 lb	665 lb	660 lb	0.8		
H20	129 G	129 G	129 G	0.0	1076.5	
MB AE90	35 fl.oz	35 fl.oz	35 fl.oz	0.0		
32N	148 fl.oz	148 fl.oz	148 fl.oz	0.0		
	232 fl.oz	232 fl.oz	231 fl.oz	0.4		

DryAggs:	14112 lb
Cems:	3330 lb
Waters:	1372 lb
Total:	19166 lb
Wat/Cem:	0.412
Add:	7 G

10:43:01a 09/15/15
Bottles Empty

	Start	End
AGG	0	0 lb
CEM	0	0 lb

ed By_____

Center Redi Mix Inc.
P.O. Box 608
1504 W. Hwy 112
Center CO 81125
719-754-2744

Ticket No. 34745

Moltz Constructors Inc.
P.O. Box 1030
Cody WY 82414

Continental Dam Project
Creede West Hwy 149 past Clear
Creek past mi mark 48
Left Rd 513 5 mi to job site

Today 10.00 yd

11:19:25a 5.00 yd 736.50 yd 3768

09/15/15 2 Ken Smith 3.00 in 5.00

5.00	4500PSI LH	7 Sack Class DP Concrete	736.50	117.75	588.75
.00	DELIVERY	Delivery Charge	736.50	72.00	360.00

SubTotal $ 948.75
Tax 2.900 17.07
Total $ 965.82

11:24:51a

Order Total 141641.00

Ticket No. 34745

Batch size 5.00 yd

-Material-	-Indication-	- AVDP EQU -	- Targets	-- -% Tol-	WatFree	%Moist
3\4 AGG	8020 lb	8020 lb	8040 lb	-0.2	-200.5	0.00
SAND	3420 lb	3420 lb	3260 lb	4.9*	280.5	11.66
SAND3	3180 lb	3180 lb	3200 lb	-0.6	209.6	9.73
I-II	2690 lb	2690 lb	2640 lb	1.9*		
FLYASH	660 lb	660 lb	660 lb	0.0		
H20	130 G	130 G	130 G	0.0	1084.8	
MB AE90	36 fl.oz	36 fl.oz	35 fl.oz	2.9		
[illegible]N	148 fl.oz	148 fl.oz	148 fl.oz	0.0		
[illegible]O	233 fl.oz	233 fl.oz	231 fl.oz	0.9		

DryAggs: 13981 lb
Cems: 3350 lb
Waters: 1374 lb
Total: 19055 lb
Wat/Cem: 0.410
Add: 8 G

11:24:51a 09/15/15
Bottles Empty

	Start	End
AGG	0	0 lb
CEM	0	0 lb

eceived By_____

Center Redi Mix Inc.
P.O. Box 608
1504 W. Hwy 112
Center CO 81125
719-754-2744

Ticket No. 34721

Møltz Constructors Inc.
P.O. Box 1030
Cody WY 82414

Continental Dam Project
Creede West Hwy 149 past Clear
Creek past mi mark 48
Left Rd 513 5 mi to job site

Today 6.50 yd

10:05:19a 6.50 yd 726.50 yd 3765

09/11/15 1 Ken Smith 3.00 in 5.00

6.50	4500PSI LH	7 Sack Class DP Concrete	726.50	117.75	765.38
6.50	DELIVERY	Delivery Charge	726.50	72.00	468.00

SubTotal $	1233.38
Tax 2.900	22.20
Total $	1255.58

10:11:19a

Order Total 139709.36

Ticket No. 34721

Batch size 6.50 yd

-Material-	-Indication-	- AVDP EQU -	- Targets --	-% Tol-	WatFree	%Moist
3\4 AGG	10460 lb	10460 lb	10460 lb	0.0	-261.5	0.00
SAND	4540 lb	4540 lb	4240 lb	7.1*	361.2	11.36
SAND3	4180 lb	4180 lb	4220 lb	-0.9	316.3	11.16
I-II	3445 lb	3445 lb	3430 lb	0.4		
FLYASH	880 lb	880 lb	860 lb	2.3*		
H20	164 G	164 G	164 G	0.0	1368.6	
MB AE90	46 fl.oz	46 fl.oz	46 fl.oz	0.0		
32?N	194 fl.oz	194 fl.oz	194 fl.oz	0.0		
D??	304 fl.oz	304 fl.oz	300 fl.oz	1.3		

DryAggs:	18297 lb
Cems:	4325 lb
Waters:	1785 lb
Total:	24874 lb
Wat/Cem:	0.413
Add:	9 G

10:11:19a 09/11/15
Bottles Empty

	Start	End
AGG	0	20 lb
CEM	0	0 lb

Received By_____

Center Redi Mix Inc.
P.O. Box 608
1504 W. Hwy 112
Center CO 81125
719-754-2744

Ticket No. 34708

Moltz Constructors Inc.
P.O. Box 1030
Cody WY 82414

Continental Dam Project
Creede West Hwy 149 past Clear
Creek past mi mark 48
Left Rd 513 5 mi to job site

Today 32.00 yd

02:01:00p	8.00 yd	720.00 yd	3765	
09/10/15	4	Ken Smith	3.00 in	5.00

.00	4500PSI LH	7 Sack Class DP Concrete	720.00	117.75	942.00
.00	DELIVERY	Delivery Charge	720.00	72.00	576.00

SubTotal $	1518.00
Tax 2.900	27.32
Total $	1545.32

02:08:42p

Order Total 138453.78

Ticket No. 34708

Batch size 8.00 yd

-Material-	-Indication-	- AVDP EQU -	- Targets --	-% Tol-	WatFree	%Moist
3\4 AGG	12840 lb	12840 lb	12880 lb	-0.3	-321.0	0.00
SAND	5440 lb	5440 lb	5200 lb	4.6*	413.8	10.94
SAND3	5100 lb	5100 lb	5140 lb	-0.8	329.8	9.85
I-II	4255 lb	4255 lb	4225 lb	0.7		
FLYASH	1080 lb	1080 lb	1055 lb	2.4*		
H20	213 G	213 G	213 G	0.0	1777.5	
MB AE90	55 fl.oz	55 fl.oz	54 fl.oz	1.9		
[illegible]	238 fl.oz	238 fl.oz	238 fl.oz	0.0		
[illegible]O	371 fl.oz	371 fl.oz	370 fl.oz	0.3		

DryAggs: 22386 lb
Cems: 5335 lb
Waters: 2200 lb
Total: 30492 lb
Wat/Cem: 0.412
Add: 11 G

02:08:42p 09/10/15
Bottles Empty

	Start	End
AGG	0	20 lb
CEM	0	0 lb

[illegible]ed By_____

Center Redi Mix Inc.
P.O. Box 608
1504 W. Hwy 112
Center CO 81125
719-754-2744

Ticket No. 34707

Moltz Constructors Inc.
P.O. Box 1030
Cody WY 82414

Continental Dam Project
Creede West Hwy 149 past Clear
Creek past mi mark 48
Left Rd 513 5 mi to job site

Today 24.00 yd

01:24:33p 8.00 yd 720.00 yd 33JV

09/10/15 3 Ken Smith 3.00 in 5.00

.00	4500PSI LH	7 Sack Class DP Concrete	720.00	117.75	942.00
.00	DELIVERY	Delivery Charge	720.00	72.00	576.00

SubTotal $ 1518.00
Tax 2.900 27.32
Total $ 1545.32

01:37:18p

Order Total 136908.46

Ticket No. 34707

Batch size 8.00 yd

-Material-	-Indication-	- AVDP EQU -	- Targets --	-% Tol-	WatFree	%Moist
3\4 AGG	12840 lb	12840 lb	12880 lb	-0.3	-321.0	0.00
SAND	5480 lb	5480 lb	5200 lb	5.4*	427.5	11.17
SAND3	5100 lb	5100 lb	5140 lb	-0.8	330.3	9.87
I-II	4245 lb	4245 lb	4225 lb	0.5		
FLYASH	1085 lb	1085 lb	1055 lb	2.8*		
420	211 G	211 G	211 G	0.0	1760.8	
B AE90	54 fl.oz	54 fl.oz	54 fl.oz	0.0		
	238 fl.oz	238 fl.oz	238 fl.oz	0.0		
D	372 fl.oz	372 fl.oz	370 fl.oz	0.5		

DryAggs: 22411 lb
Cems: 5330 lb
Waters: 2198 lb
Total: 30511 lb
Wat/Cem: 0.412
Add: 11 G

01:37:18p 09/10/15
Bottles Empty

	Start	End
AGG	0	0 lb
CEM	0	0 lb

eceived By_____

Center Redi Mix Inc.
P.O. Box 608
1504 W. Hwy 112
Center CO 81125
719-754-2744

Ticket No. 34706

Moltz Constructors Inc.
P.O. Box 1030
Cody WY 82414

Continental Dam Project
Creede West Hwy 149 past Clear
Creek past mi mark 48
Left Rd 513 5 mi to job site

Today 16.00 yd

12:42:44p 8.00 yd 720.00 yd 30DC

09/10/15 2 Ken Smith 3.00 in 5.00

.00	4500PSI LH	7 Sack Class DP Concrete	720.00	117.75	942.00
.00	DELIVERY	Delivery Charge	720.00	72.00	576.00

SubTotal $ 1518.00
Tax 2.900 27.32
Total $ 1545.32

12:50:37p

Order Total 135363.14

icket No. 34706

Batch size 8.00 yd

-Material-	-Indication-	- AVDP EQU -	- Targets --	-% Tol-	WatFree	%Moist
3\4 AGG	12840 lb	12840 lb	12880 lb	-0.3	-321.0	0.00
SAND	5360 lb	5360 lb	5200 lb	3.1*	399.5	11.02
SAND3	5120 lb	5120 lb	5160 lb	-0.8	350.6	10.30
I-II	4265 lb	4265 lb	4225 lb	0.9		
FLYASH	1095 lb	1095 lb	1055 lb	3.8*		
H20	212 G	212 G	212 G	0.0	1769.1	
MB AE90	55 fl.oz	55 fl.oz	54 fl.oz	1.9		
3	238 fl.oz	238 fl.oz	238 fl.oz	0.0		
DE.VO	372 fl.oz	372 fl.oz	370 fl.oz	0.5		

DryAggs: 22310 lb
Cems: 5360 lb
Waters: 2198 lb
Total: 30449 lb
Wat/Cem: 0.410
Add: 12 G

12:50:37p 09/10/15
Bottles Empty

	Start	End	
AGG	0	0	lb
CEM	0	0	lb

eceived By

Center Redi Mix Inc.
P.O. Box 608
1504 W. Hwy 112
Center CO 81125
719-754-2744

Ticket No. 34705

Moltz Constructors Inc.
P.O. Box 1030
Cody WY 82414

Continental Dam Project
Creede West Hwy 149 past Clear
Creek past mi mark 48
Left Rd 513 5 mi to job site

Today 8.00 yd

11:54:26a 8.00 yd 720.00 yd 32JN

09/10/15 1 Ken Smith 3.00 in 5.00

.00	4500PSI LH	7 Sack Class DP Concrete	720.00	117.75	942.00
.00	DELIVERY	Delivery Charge	720.00	72.00	576.00

SubTotal $ 1518.00
Tax 2.900 27.32
Total $ 1545.32

12:01:25p

Order Total 133817.82

icket No. 34705

Batch size 8.00 yd

-Material-	-Indication-	- AVDP EQU -	- Targets --	-% Tol-	WatFree	%Moist
3\4 AGG	12840 lb	12840 lb	12880 lb	-0.3	-321.0	0.00
SAND	5460 lb	5460 lb	5200 lb	5.0*	405.8	11.00
SAND3	5100 lb	5100 lb	5140 lb	-0.8	335.0	9.97
I-II	4245 lb	4245 lb	4225 lb	0.5		
FLYASH	1120 lb	1120 lb	1055 lb	6.2*		
H20	213 G	213 G	213 G	0.0	1777.5	
MP-AE90	55 fl.oz	55 fl.oz	54 fl.oz	1.9		
[illegible]	238 fl.oz	238 fl.oz	238 fl.oz	0.0		
DELVO	372 fl.oz	372 fl.oz	370 fl.oz	0.5		

DryAggs: 22396 lb
Cems: 5365 lb
Waters: 2197 lb
Total: 30542 lb
Wat/Cem: 0.410
Add: 13 G

12:01:25p 09/10/15
Bottles Empty

	Start	End
AGG	0	0 lb
CEM	0	0 lb

eceived By_____

Center Redi Mix Inc.
P.O. Box 608
1504 W. Hwy 112
Center CO 81125
719-754-2744

Ticket No. 34672

Moltz Constructors Inc.
P.O. Box 1030
Cody WY 82414

Continental Dam Project
Creede West Hwy 149 past Clear
Creek past mi mark 48
Left Rd 513 5 mi to job site

Today 32.00 yd

01:00:09p 8.00 yd 688.00 yd 30DC

09/04/15 4 Ken Smith 3.00 in 5.00

8.00	4500PSI LH	7 Sack Class DP Concrete	688.00	117.75	942.00
8.00	DELIVERY	Delivery Charge	688.00	72.00	576.00

SubTotal $	1518.00
Tax 2.900	27.32
Total $	1545.32

01:06:28p

Order Total 130727.18

Ticket No. 34672

Batch size 8.00 yd

-Material-	-Indication-	- AVDP EQU -	- Targets --	-% Tol-	WatFree	%Moist
3\4 AGG	12900 lb	12900 lb	12940 lb	-0.3	-258.0	0.00
SAND	5420 lb	5420 lb	5200 lb	4.2*	416.2	10.75
SAND3	5100 lb	5100 lb	5140 lb	-0.8	339.5	9.54
I-II	4240 lb	4240 lb	4225 lb	0.4		
FLYASH	1060 lb	1060 lb	1055 lb	0.5		
H20	204 G	204 G	204 G	0.0	1702.4	
MB AE90	57 fl.oz	57 fl.oz	56 fl.oz	1.8		
32?N	238 fl.oz	238 fl.oz	238 fl.oz	0.0		
D??D	373 fl.oz	373 fl.oz	370 fl.oz	0.8		

DryAggs: 22450 lb
Cems: 5300 lb
Waters: 2200 lb
Total: 30422 lb
Wat/Cem: 0.415
Add: 9 G

01:06:28p 09/04/15
Bottles Empty

	Start	End
AGG	20	40 lb
CEM	0	0 lb

Received By_____

Center Redi Mix Inc.
P.O. Box 608
1504 W. Hwy 112
Center CO 81125
719-754-2744

Ticket No. 34671

#3

Moltz Constructors Inc.
P.O. Box 1030
Cody WY 82414

Continental Dam Project
Creede West Hwy 149 past Clear
Creek past mi mark 48
Left Rd 513 5 mi to job site

Today 24.00 yd

12:33:54p 8.00 yd 688.00 yd 32JN

09/04/15 3 Ken Smith 3.00 in 5.00

.00	4500PSI LH	7 Sack Class DP Concrete	688.00	117.75	942.00
.00	DELIVERY	Delivery Charge	688.00	72.00	576.00

SubTotal $ 1518.00
Tax 2.900 27.32
Total $ 1545.32

12:41:54p

Order Total 129181.86

Ticket No. 34671

Batch size 8.00 yd

-Material-	-Indication-	- AVDP EQU -	- Targets --	-% Tol-	WatFree	%Moist
3\4 AGG	12860 lb	12860 lb	12800 lb	-0.2	-321.5	0.00
SAND	5340 lb	5340 lb	5200 lb	2.7*	406.2	10.67
SAND3	5100 lb	5100 lb	5140 lb	-0.8	334.8	9.43
I-II	4265 lb	4265 lb	4225 lb	0.9		
FLYASH	1060 lb	1060 lb	1055 lb	0.5		
H20	214 G	214 G	214 G	0.0	1785.8	
MB AE90	57 fl.oz	57 fl.oz	56 fl.oz	1.8		
[illegible]	238 fl.oz	238 fl.oz	238 fl.oz	0.0		
D[illegible]O	372 fl.oz	372 fl.oz	370 fl.oz	0.5		

DryAggs: 22346 lb
Cems: 5325 lb
Waters: 2205 lb
Total: 30411 lb
Wat/Cem: 0.414
Add: 10 G

12:41:54p 09/04/15
Bottles Empty

	Start	End
AGG	0	40 lb
CEM	0	0 lb

Received By_____

Center Redi Mix Inc.
P.O. Box 608
1504 W. Hwy 112
Center CO 81125
719-754-2744

Ticket No. 34671

Moltz Constructors Inc.
P.O. Box 1030
Cody WY 82414

Continental Dam Project
Creede West Hwy 149 past Clear
Creek past mi mark 48
Left Rd 513 5 mi to job site

Today 24.00 yd

12:33:54p 8.00 yd 688.00 yd 32JN

09/04/15 3 Ken Smith 3.00 in 5.00

.00	4500PSI LH	7 Sack Class DP Concrete	688.00	117.75	942.00
.00	DELIVERY	Delivery Charge	688.00	72.00	576.00

6.2 AIR
4" SLUMP

SubTotal $ 1518.00
Tax 2.900 27.32
Total $ 1545.32

12:41:54p

Order Total 129181.86

Ticket No. 34671

Batch size 8.00 yd

-Material-	-Indication-	- AVDP EQU -	- Targets --	-% Tol-	WatFree	%Moist
3\4 AGG	12860 lb	12860 lb	12880 lb	-0.2	-321.5	0.00
SAND	5340 lb	5340 lb	5200 lb	2.7*	406.2	10.67
SAND3	5100 lb	5100 lb	5140 lb	-0.8	334.8	9.43
I-II	4265 lb	4265 lb	4225 lb	0.9		
FLYASH	1060 lb	1060 lb	1055 lb	0.5		
H20	214 G	214 G	214 G	0.0	1785.8	
MB AE90	57 fl.oz	57 fl.oz	56 fl.oz	1.8		
3	238 fl.oz	238 fl.oz	238 fl.oz	0.0		
DE.O	372 fl.oz	372 fl.oz	370 fl.oz	0.5		

DryAggs: 22346 lb
Cems: 5325 lb
Waters: 2205 lb
Total: 30411 lb
Wat/Cem: 0.414
Add: 10 G

12:41:54p 09/04/15
Bottles Empty

	Start	End
AGG	0	40 lb
CEM	0	0 lb

eceived By_____

Center Redi Mix Inc.
P.O. Box 608
1504 W. Hwy 112
Center CO 81125
719-754-2744

Ticket No. 34670

Moltz Constructors Inc.
P.O. Box 1030
Cody WY 82414

Continental Dam Project
Creede West Hwy 149 past Clear
Creek past mi mark 48
Left Rd 513 5 mi to job site

Today 16.00 yd

12:00:46p 8.00 yd 688.00 yd 37GS

09/04/15 2 Ken Smith 3.00 in 5.00

.00	4500PSI LH	7 Sack Class DP Concrete	688.00	117.75	942.00
.00	DELIVERY	Delivery Charge	688.00	72.00	576.00

SubTotal $ 1518.00
Tax 2.900 27.32
Total $ 1545.32

12:07:07p

Order Total 127636.54

Ticket No. 34670

Batch size 8.00 yd

-Material-	-Indication-	- AVDP EQU -	- Targets -	-% Tol-	Wat	Free	%Moist
3\4 AGG	12840 lb	12840 lb	12880 lb	-0.3	-321.0		0.00
SAND	5340 lb	5340 lb	5180 lb	3.1*	388.7		10.55
SAND3	5080 lb	5080 lb	5120 lb	-0.8	322.9		9.46
I-II	4245 lb	4245 lb	4225 lb	0.5			
FLYASH	1060 lb	1060 lb	1055 lb	0.5			
H20	217 G	217 G	217 G	0.0	1810.9		
MB AE90	56 fl.oz	56 fl.oz	56 fl.oz	0.0			
3	238 fl.oz	238 fl.oz	238 fl.oz	0.0			
D 0	373 fl.oz	373 fl.oz	370 fl.oz	0.8			

DryAggs: 22312 lb
Cems: 5305 lb
Waters: 2201 lb
Total: 30376 lb
Wat/Cem: 0.415
Add: 9 G

12:07:07p 09/04/15
Bottles Empty

	Start	End
AGG	0	40 lb
CEM	0	0 lb

eceived By

#2

Center Redi Mix Inc.
P.O. Box 608
1504 W. Hwy 112
Center CO 81125
719-754-2744

Ticket No. 34670

Moltz Constructors Inc.
P.O. Box 1030
Cody WY 82414

Continental Dam Project
Creede West Hwy 149 past Clear
Creek past mi mark 48
Left Rd 513 5 mi to job site

Today 16.00 yd

12:00:46p 8.00 yd 688.00 yd 3765

09/04/15 2 Ken Smith 3.00 in 5.00

.00	4500PSI LH	7 Sack Class DP Concrete	688.00	117.75	942.00
.00	DELIVERY	Delivery Charge	688.00	72.00	576.00

SubTotal $ 1518.00
Tax 2.900 27.32
Total $ 1545.32

12:07:07p

Order Total 127636.54

icket No. 34670

Batch size 8.00 yd

Material	Indication	AVDP EQU	Targets	-% Tol-	WatFree	%Moist
3\4 AGG	12940 lb	12840 lb	12880 lb	-0.3	-321.0	0.00
SAND	5340 lb	5340 lb	5180 lb	3.1*	388.7	10.55
SAND3	5080 lb	5080 lb	5120 lb	-0.8	322.9	9.46
I-II	4245 lb	4245 lb	4225 lb	0.5		
FLYASH	1060 lb	1060 lb	1055 lb	0.5		
H20	217 G	217 G	217 G	0.0	1810.9	
MB AE90	56 fl.oz	56 fl.oz	56 fl.oz	0.0		
[illegible]	238 fl.oz	238 fl.oz	238 fl.oz	0.0		
[illegible]	373 fl.oz	373 fl.oz	370 fl.oz	0.8		

DryAggs: 22312 lb
Cems: 5305 lb
Waters: 2201 lb
Total: 30376 lb
Wat/Cem: 0.415
Add: 9 G

12:07:07p 09/04/15
Bottles Empty

	Start	End
AGG	0	40 lb
CEM	0	0 lb

eceived By _____

Center Redi Mix Inc.
P.O. Box 608
1504 W. Hwy 112
Center * CO 81125
719-754-2744

Ticket No. 34669

Molt2 Constructors Inc.
P.O. Box 1030
Cody WY 82414

Continental Dam Project
Creede West Hwy 149 past Clear
Creek past mi mark 48
Left Rd 513 5 mi to job site

Today 8.00 yd

11:16:24a 8.00 yd 688.00 yd 33JV

09/04/15 1 Ken Smith 3.00 in 5.00

.00	4500PSI LH	7 Sack Class DP Concrete	688.00	117.75	942.00
.00	DELIVERY	Delivery Charge	688.00	72.00	576.00

6.2
11
3

SubTotal $ 1518.00
Tax 2.900 27.32
Total $ 1545.32

11:24:56a

Order Total 126091.22

icket No. 34669

Batch size 8.00 yd

-Material-	-Indication-	AVDP EQU	Targets	-% Tol-	Wat	Free	%Moist
3\4 AGG	12860 lb	12860 lb	12880 lb	-0.2		-321.5	0.00
SAND	5360 lb	5360 lb	5180 lb	3.5*		392.3	10.59
SAND3	5080 lb	5080 lb	5120 lb	-0.8		323.4	9.47
I-II	4265 lb	4265 lb	4225 lb	0.9			
FLYASH	1055 lb	1055 lb	1055 lb	0.0			
H20	217 G	217 G	217 G	0.0		1810.9	
MB AE90	57 fl.oz	57 fl.oz	56 fl.oz	1.8			
3	238 fl.oz	238 fl.oz	238 fl.oz	0.0			
DE d	371 fl.oz	371 fl.oz	370 fl.oz	0.3			

DryAggs: 22347 lb
Cems: 5320 lb
Waters: 2205 lb
Total: 30431 lb
Wat/Cem: 0.414
Add: 10 G

11:24:56a 09/04/15
Bottles Empty

	Start	End
AGG	0	0 lb
CEM	0	0 lb

eceived By

Center Redi Mix Inc.
P.O. Box 608
1504 W. Hwy 112
Center CO 81125
719-754-2744

Ticket No. 34669

#1

Moltz Constructors Inc.
P.O. Box 1030
Cody WY 82414

Continental Dam Project
Creede West Hwy 149 past Clear
Creek past mi mark 48
Left Rd 513 S mi to job site

Today 8.00 yd

11:16:24a 8.00 yd 680.00 yd 33JV

09/04/15 1 Ken Smith 3.00 in 5.00

8.00	4500PSI LH	7 Sack Class DP Concrete	680.00	117.75	942.00
1.00	DELIVERY	Delivery Charge	680.00	72.00	576.00

Subtotal $	1518.00
Tax 2.900	27.32
Total $	1545.32

11:24:56a

Order Total 126091.22

Ticket No. 34669

Batch size 8.00 yd

-Material-	-Indication-	- AVDP EQU -	- Targets ---	-% Tol-	WatFree	%Moist
3\4 AGG	12860 lb	12800 lb	12880 lb	-0.2	-321.5	0.00
SAND	5360 lb	5360 lb	5180 lb	3.5*	392.3	10.59
SAND3	5080 lb	5080 lb	5120 lb	-0.8	323.4	9.47
I-II	4265 lb	4265 lb	4225 lb	0.9		
FLYASH	1055 lb	1055 lb	1055 lb	0.0		
H20	217 G	217 G	217 G	0.0	1810.9	
MB AE90	57 fl.oz	57 fl.oz	56 fl.oz	1.8		
[illegible]	238 fl.oz	238 fl.oz	238 fl.oz	0.0		
D[illegible]0	371 fl.oz	371 fl.oz	370 fl.oz	0.3		

DryAggs:	22347 lb
Cems:	5320 lb
Waters:	2205 lb
Total:	30431 lb
Wat/Cem:	0.414
Add:	10 G

11:24:56a 09/04/15
Bottles Empty

	Start	End	
AGG	0	0	lb
CEM	0	0	lb

Received By_____

Center Redi Mix Inc.
P.O. Box 608
1504 W. Hwy 112
Center CO 81125
719-754-2744

Ticket No. 34649

Moltz Constructors Inc.
P.O. Box 1030
Cody WY 82414

Continental Dam Project
Creede West Hwy 149 past Clear
Creek past mi mark 48
Left Rd 513 5 mi to job site

Today 32.00 yd

01:43:17p 8.00 yd 648.00 yd 33JV

09/02/15 4 Ken Smith 3.00 in 5.00

.00	4500PSI LH	7 Sack Class DP Concrete	648.00	117.75	942.00
.00	DELIVERY	Delivery Charge	648.00	72.00	576.00

SubTotal $ 1518.00
Tax 2.900 27.32
Total $ 1545.32

01:51:06p

Order Total 124545.90

Ticket No. 34649

Batch size 8.00 yd

-Material-	-Indication-	- AVDP EQU -	- Targets --	-% Tol-	WatFree	%Moist
3\4 AGG	12840 lb	12840 lb	12880 lb	-0.3	-321.0	0.00
SAND	5360 lb	5360 lb	5140 lb	4.3*	353.2	10.27
SAND3	5000 lb	5000 lb	5040 lb	-0.8	244.5	8.30
I-II	4290 lb	4290 lb	4225 lb	1.5*		
FLYASH	1065 lb	1065 lb	1055 lb	0.9		
H20	230 G	230 G	230 G	0.0	1919.3	
MB AE90	56 fl.oz	56 fl.oz	56 fl.oz	0.0		
3	238 fl.oz	238 fl.oz	238 fl.oz	0.0		
DE VO	373 fl.oz	373 fl.oz	370 fl.oz	0.8		

DryAggs: 22318 lb
Cems: 5355 lb
Waters: 2196 lb
Total: 30474 lb
Wat/Cem: 0.410
Add: 12 G

01:51:06p 09/02/15
Bottles Empty

	Start	End
AGG	0	0 lb
CEM	0	0 lb

eceived By_____

Center Redi Mix Inc.
P.O. Box 608
1504 W. Hwy 112
Center CO 81125
719-754-2744

Ticket No. 34648

Moltz Constructors Inc.
P.O. Box 1030
Cody WY 82414

Continental Dam Project
Creede West Hwy 149 past Clear
Creek past mi mark 48
Left Rd 513 5 mi to job site

Today 24.00 yd

01:13:36p 8.00 yd 648.00 yd 32JN

09/02/15 3 Ken Smith 3.00 in 5.00

.00	4500PSI LH	7 Sack Class DP Concrete	648.00	117.75	942.00
.00	DELIVERY	Delivery Charge	648.00	72.00	576.00

SubTotal $ 1518.00
Tax 2.900 27.32
Total $ 1545.32

01:20:53p

Order Total 123000.58

Ticket No. 34648

Batch size 8.00 yd

-Material-	-Indication-	- AVDP EQU -	- Targets --	-% Tol-	WatFree	%Moist
3\4 AGG	12840 lb	12840 lb	12880 lb	-0.3	-321.0	0.00
SAND	5340 lb	5340 lb	5120 lb	4.3*	338.1	9.96
SAND3	5020 lb	5020 lb	5060 lb	-0.8	265.1	8.74
I-II	4265 lb	4265 lb	4225 lb	0.9		
FLYASH	1080 lb	1080 lb	1055 lb	2.4*		
H20	230 G	230 G	230 G	0.0	1919.3	
MB AE90	57 fl.oz	57 fl.oz	56 fl.oz	1.8		
3	238 fl.oz	238 fl.oz	238 fl.oz	0.0		
D	372 fl.oz	372 fl.oz	370 fl.oz	0.5		

DryAggs: 22313 lb
Cems: 5345 lb
Waters: 2202 lb
Total: 30464 lb
Wat/Cem: 0.412
Add: 11 G

01:20:52p 09/02/15
Bottles Empty

	Start	End
AGG	0	20 lb
CEM	0	0 lb

Received By

Center Redi Mix Inc.
P.O. Box 608
1504 W. Hwy 112
Center CO 81125
719-754-2744

Ticket No. 34647

Moltz Constructors Inc.
P.O. Box 1030
Cody WY 82414

Continental Dam Project
Creede West Hwy 149 past Clear
Creek past mi mark 48
Left Rd 513 5 mi to job site

Today 16.00 yd

12:35:52p 8.00 yd 648.00 yd 3765

09/02/15 2 Ken Smith 3.00 in 5.00

.00	4500PSI LH	7 Sack Class DP Concrete	648.00	117.75	942.00
.00	DELIVERY	Delivery Charge	648.00	72.00	576.00

SubTotal $ 1518.00
Tax 2.900 27.32
Total $ 1545.32

12:42:50p

Order Total 121455.26

Ticket No. 34647

Batch size 8.00 yd

-Material-	-Indication-	- AVDP EQU -	- Targets ---	-% Tol-	WatFree	%Moist
3\4 AGG	12820 lb	12820 lb	12880 lb	-0.5	-320.5	0.00
SAND	5280 lb	5280 lb	5120 lb	3.1*	339.2	10.07
SAND3	5020 lb	5020 lb	5060 lb	-0.8	254.3	8.50
I-II	4225 lb	4225 lb	4225 lb	0.0		
FLYASH	1055 lb	1055 lb	1055 lb	0.0		
H20	231 G	231 G	231 G	0.0	1927.7	
MB AE90	56 fl.oz	56 fl.oz	56 fl.oz	0.0		
[illegible]	238 fl.oz	238 fl.oz	238 fl.oz	0.0		
DELVO	376 fl.oz	376 fl.oz	370 fl.oz	1.6		

DryAggs: 22244 lb
Cems: 5280 lb
Waters: 2201 lb
Total: 30328 lb
Wat/Cem: 0.417
Add: 8 G

12:42:50p 09/02/15
Bottles Empty

	Start	End
AGG	0	0 lb
CEM	0	0 lb

Received By_____

Center Redi Mix Inc.
P.O. Box 608
1504 W. Hwy 112
Center CO 81125
719-754-2744

Ticket No. 34646

Moltz Constructors Inc.
P.O. Box 1030
Cody WY 82414

Continental Dam Project
Creede West Hwy 149 past Clear
Creek past mi mark 48
Left Rd 513 5 mi to job site

Today 8.00 yd

11:51:20a 8.00 yd 648.00 yd 30GS

09/02/15 1 Ken Smith 3.00 in 5.00

.00	4500PSI LH	7 Sack Class DP Concrete	648.00	117.75	942.00
.00	DELIVERY	Delivery Charge	648.00	72.00	576.00

SubTotal $	1518.00
Tax 2.900	27.32
Total $	1545.32

11:58:01a

Order Total 119909.94

Ticket No. 34646

Batch size 8.00 yd

-Material-	-Indication-	- AVDP EQU -	- Targets	-- -% Tol-	WatFree	%Moist
3\4 AGG	12840 lb	12840 lb	12800 lb	-0.3	-321.0	0.00
SAND	5420 lb	5420 lb	5140 lb	5.4*	352.7	10.17
SAND3	5020 lb	5020 lb	5060 lb	-0.8	258.9	8.60
-II	4250 lb	4250 lb	4225 lb	0.6		
YASH	1055 lb	1055 lb	1055 lb	0.0		
	228 G	228 G	228 G	0.0	1902.7	
E90	56 fl.oz	56 fl.oz	56 fl.oz	0.0		
	238 fl.oz	238 fl.oz	238 fl.oz	0.0		
	374 fl.oz	374 fl.oz	370 fl.oz	1.1		

DryAggs:	22382 lb
Cems:	5305 lb
Waters:	2193 lb
Total:	30488 lb
Wat/Cem:	0.413
Add:	10 G

11:58:01a 09/02/15
Bottles Empty

	Start	End
AGG	0	0 lb
CEM	0	0 lb

By_____

Center Redi Mix Inc.
P.O. Box 608
1504 W. Hwy 112
Center CO 81125
719-754-2744

Ticket No. 34613

Moltz Constructors Inc.
P.O. Box 1030
Cody WY 82414

Continental Dam Project
Creede West Hwy 149 past Clear
Creek past mi mark 48
Left Rd 513 5 mi to job site

Today 27.00 yd

01:02:13p 6.00 yd 616.00 yd 33JV

08/28/15 4 Ken Smith 3.00 in 5.00

6.00	4500PSI LH	7 Sack Class DP Concrete	616.00	117.75	706.50
.00	DELIVERY	Delivery Charge	616.00	72.00	432.00

Subtotal $	1138.50
Tax 2.900	20.49
Total $	1158.99

01:07:51p

Order Total 118364.62

Ticket No. 34613

Batch size 6.00 yd

-Material-	-Indication-	- AVDP EQU -	- Targets -	-% Tol-	WatFree	%Moist
3\4 AGG	9680 lb	9680 lb	9660 lb	0.2	-242.0	0.00
SAND	4160 lb	4160 lb	3920 lb	6.1*	340.5	11.58
SAND3	3080 lb	3080 lb	3920 lb	-1.0	304.8	11.19
I-II	3205 lb	3205 lb	3170 lb	1.1*		
FLYASH	885 lb	885 lb	790 lb	12.0*		
H20	149 G	149 G	149 G	0.0	1243.4	
MB AE90	41 fl.oz	41 fl.oz	40 fl.oz	2.5		
322N	178 fl.oz	178 fl.oz	178 fl.oz	0.0		
[illegible]0	279 fl.oz	279 fl.oz	277 fl.oz	0.7		

DryAggs:	16898 lb
Cems:	4090 lb
Waters:	1647 lb
Total:	23053 lb
Wat/Cem:	0.403
Add:	13 G

01:07:51p 08/28/15
Bottles Empty

	Start	End
AGG	0	0 lb
CEM	0	0 lb

eceived By_____

Center Redi Mix Inc.
P.O. Box 608
1504 W. Hwy 112
Center CO 81125
719-754-2744

Ticket No. 34612

Moltz Constructors Inc.
P.O. Box 1030
Cody WY 82414

Continental Dam Project
Creede West Hwy 149 past Clear
Creek past mi mark 48
Left Rd 513 5 mi to job site

Today 21.00 yd

12:34:12p 7.00 yd 616.00 yd 3765

08/28/15 3 Ken Smith 3.00 in 5.00

7.00	4500PSI LH	7 Sack Class DP Concrete	616.00	117.75	824.25
7.00	DELIVERY	Delivery Charge	616.00	72.00	504.00

SubTotal $ 1328.25
Tax 2.900 23.90
Total $ 1352.15

12:40:54p

Order Total 117205.63

Ticket No. 34612

Batch size 7.00 yd

-Material-	-Indication-	- AVDP EQU -	- Targets --	-% Tol-	WatFree	%Moist
3\4 AGG	11220 lb	11220 lb	11260 lb	-0.4	-280.5	0.00
SAND	4740 lb	4740 lb	4560 lb	3.9*	389.6	11.41
SAND3	4500 lb	4500 lb	4540 lb	-0.9	341.4	10.64
-II	3760 lb	3760 lb	3695 lb	1.8*		
YASH	1005 lb	1005 lb	925 lb	8.6*		
0	177 G	177 G	177 G	0.0	1477.1	
AE90	47 fl.oz	47 fl.oz	46 fl.oz	2.2		
N	208 fl.oz	208 fl.oz	208 fl.oz	0.0		
0	326 fl.oz	326 fl.oz	323 fl.oz	0.9		

DryAggs: 19542 lb
Cems: 4765 lb
Waters: 1928 lb
Total: 26702 lb
Wat/Cem: 0.405
Add: 14 G

12:40:54p 08/28/15
Bottles Empty

	Start	End
AGG	0	0 lb
CEM	0	0 lb

ed By_____

Center Redi Mix Inc.
P.O. Box 608
1504 W. Hwy 112
Center CO 81125
719-754-2744

Ticket No. 34611

Moltz Constructors Inc.
P.O. Box 1030
Cody WY 82414

Continental Dam Project
Creede West Hwy 149 past Clear
Creek past mi mark 48
Left Rd 513 5 mi to job site

Today 14.00 yd

12:13:00p 7.00 yd 616.00 yd 32JN

08/28/15 2 Ken Smith 3.00 in 5.00

7.00	4500PSI LH	7 Sack Class DP Concrete	616.00	117.75	824.25
7.00	DELIVERY	Delivery Charge	616.00	72.00	504.00

SubTotal $	1328.25
Tax 2.900	23.90
Total $	1352.15

12:18:12p

Order Total 115853.48

Ticket No. 34611

Batch size 7.00 yd

-Material-	-Indication-	-- AVDP EQU - -	Targets ---	-% Tol-	WatFree	%Moist
3\4 AGG	11220 lb	11220 lb	11260 lb	-0.4	-280.5	0.00
SAND	4700 lb	4700 lb	4580 lb	2.6	393.1	11.58
SAND3	4480 lb	4480 lb	4520 lb	-0.9	330.7	10.40
I-II	3725 lb	3725 lb	3695 lb	0.8		
FLYASH	930 lb	930 lb	925 lb	0.5		
H20	178 G	178 G	178 G	0.0	1485.4	
MB AE90	46 fl.oz	46 fl.oz	46 fl.oz	0.0		
322N	208 fl.oz	208 fl.oz	208 fl.oz	0.0		
DE[illegible]O	325 fl.oz	325 fl.oz	323 fl.oz	0.6		

DryAggs:	19490 lb
Cems:	4655 lb
Waters:	1929 lb
Total:	26540 lb
Wat/Cem:	0.414
Add:	9 G

12:18:12p 08/28/15
Bottles Empty

	Start	End
AGG	0	0 lb
CEM	0	0 lb

Received By_____

Center Redi Mix Inc.
P.O. Box 608
1504 W. Hwy 112
Center CO 81125
719-754-2744

Ticket No. 34610

Moltz Constructors Inc.
P.O. Box 1030
Cody WY 82414

Continental Dam Project
Creede West Hwy 149 past Clear
Creek past mi mark 48
Left Rd 513 5 mi to job site

Today 7.00 yd

11:34:05a 7.00 yd 616.00 yd 30DC

08/28/15 1 Ken Smith 3.00 in 5.00

7.00	4500PSI LH	7 Sack Class DP Concrete	616.00	117.75	824.25
7.00	DELIVERY	Delivery Charge	616.00	72.00	504.00

SubTotal $	1328.25
Tax 2.900	23.90
Total $	1352.15

11:40:49a

Order Total 114501.33

Ticket No. 34610

Batch size 7.00 yd

-Material-	-Indication-	- AVDP EQU -	- Targets --	-% Tol-	WatFree	%Moist
3\4 AGG	11240 lb	11240 lb	11260 lb	-0.2	-281.0	0.00
SAND	4800 lb	4800 lb	4600 lb	4.3*	417.4	12.21
SAND3	4480 lb	4480 lb	4520 lb	-0.9	316.2	10.23
I-II	3730 lb	3730 lb	3695 lb	0.9		
FLYASH	925 lb	925 lb	925 lb	0.0		
H20	177 G	177 G	177 G	0.0	1477.1	
MB AE90	47 fl.oz	47 fl.oz	46 fl.oz	2.2		
322N	208 fl.oz	208 fl.oz	208 fl.oz	0.0		
DE[illegible]O	326 fl.oz	326 fl.oz	323 fl.oz	0.9		

DryAggs:	19582 lb
Cems:	4655 lb
Waters:	1930 lb
Total:	26652 lb
Wat/Cem:	0.415
Add:	8 G

11:40:49a 08/28/15
Bottles Empty

	Start	End
AGG	0	0 lb
CEM	0	0 lb

Received By_____

Center Redi Mix Inc.
P.O. Box 608
1504 W. Hwy 112
Center CO 81125
719-754-2744

Ticket No. 34600

Moltz Constructors Inc.
P.O. Box 1030
Cody WY 82414

Continental Dam Project
Creede West Hwy 149 past Clear
Creek past mi mark 48
Left Rd 513 5 mi to job site

Today 31.00 yd

12:59:15p 7.00 yd 589.00 yd 32JN

08/26/15 4 Ken Smith 3.00 in 5.00

7.00	4500PSI LH	7 Sack Class DP Concrete	589.00	117.75	824.25
7.00	DELIVERY	Delivery Charge	589.00	72.00	504.00

SubTotal $	1328.25
Tax 2.900	23.90
Total $	1352.15

01:05:34p

Order Total 113149.18

Ticket No. 34600

Batch size 7.00 yd

-Material-	-Indication-	- AVDP EQU -	- Targets	-- -% Tol--	WatFree	%Moist
3\4 AGG	11280 lb	11280 lb	11260 lb	0.2	-282.0	0.00
SAND	4740 lb	4740 lb	4540 lb	4.4*	360.6	10.67
SAND3	4460 lb	4460 lb	4500 lb	-0.9	306.0	9.78
I-II	3735 lb	3735 lb	3695 lb	1.1*		
FLYASH	955 lb	955 lb	925 lb	3.2*		
H20	185 G	185 G	185 G	0.0	1543.8	
MB AE90	46 fl.oz	46 fl.oz	46 fl.oz	0.0		
32GN	208 fl.oz	208 fl.oz	208 fl.oz	0.0		
D[illegible]0	325 fl.oz	325 fl.oz	323 fl.oz	0.6		

DryAggs:	19626 lb
Cems:	4690 lb
Waters:	1928 lb
Total:	26714 lb
Wat/Cem:	0.411
Add:	10 G

01:05:34p 08/26/15
Bottles Empty

	Start	End
AGG	0	0 lb
CEM	0	0 lb

Received By_____

Center Redi Mix Inc.
P.O. Box 608
1504 W. Hwy 112
Center CO 81125
719-754-2744

Ticket No. 34599

Moltz Constructors Inc.
P.O. Box 1030
Cody WY 82414

Continental Dam Project
Creede West Hwy 149 past Clear
Creek past mi mark 48
Left Rd 513 5 mi to job site

Today 24.00 yd

12:34:10p 8.00 yd 589.00 yd 33JV

08/26/15 3 Ken Smith 3.00 in 5.00

8.00	4500PSI LH	7 Sack Class DP Concrete	589.00	117.75	942.00
1.00	DELIVERY	Delivery Charge	589.00	72.00	576.00

SubTotal $	1518.00
Tax 2.900	27.32
Total $	1545.32

12:40:36p

Order Total 111797.03

Ticket No. 34599

Batch size 8.00 yd

-Material-	-Indication-	- AVDP EQU -	- Targets --	-% Tol-	WatFree	%Moist
3\4 AGG	12840 lb	12840 lb	12880 lb	-0.3	-321.0	0.00
SAND	5500 lb	5500 lb	5220 lb	5.4*	428.5	10.89
SAND3	5120 lb	5120 lb	5160 lb	-0.8	349.2	9.73
I-II	4270 lb	4270 lb	4225 lb	1.1*		
FLYASH	1085 lb	1085 lb	1055 lb	2.8*		
H20	209 G	209 G	209 G	0.0	1744.1	
MB AE90	53 fl.oz	53 fl.oz	53 fl.oz	0.0		
322N	240 fl.oz	240 fl.oz	238 fl.oz	0.8		
D[illegible]	372 fl.oz	372 fl.oz	370 fl.oz	0.5		

DryAggs:	22466 lb
Cems:	5355 lb
Waters:	2201 lb
Total:	30559 lb
Wat/Cem:	0.411
Add:	12 G

12:40:36p 08/26/15
Bottles Empty

	Start	End	
AGG	0	0	lb
CEM	0	0	lb

Received By_____

Center Redi Mix Inc.
P.O. Box 608
1504 W. Hwy 112
Center CO 81125
719-754-2744

Ticket No. 34598

Moltz Constructors Inc.
P.O. Box 1030
Cody WY 82414

Continental Dam Project
Creede West Hwy 149 past Clear
Creek past mi mark 48
Left Rd 513 5 mi to job site

Today 16.00 yd

12:08:21p 8.00 yd 589.00 yd 30DC

08/26/15 2 Ken Swith 3.00 in 5.00

.00	4500PSI LH	7 Sack Class DP Concrete	589.00	117.75	942.00
.00	DELIVERY	Delivery Charge	589.00	72.00	576.00

SubTotal $ 1518.00
Tax 2.900 27.32
Total $ 1545.32

12:14:28p

Order Total 110251.71

Ticket No. 34598

Batch size 8.00 yd

-Material-	-Indication-	- AVDP EQU -	- Targets --	-% Tol-	WatFree	%Moist
3\4 AGG	12860 lb	12860 lb	12880 lb	-0.2	-321.5	0.00
SAND	5440 lb	5440 lb	5220 lb	4.2*	431.6	11.06
SAND3	5100 lb	5100 lb	5140 lb	-0.8	340.5	9.57
I-II	4270 lb	4270 lb	4225 lb	1.1*		
FLYASH	1065 lb	1065 lb	1055 lb	0.9		
H20	210 G	210 G	210 G	0.0	1752.4	
MB AE90	54 fl.oz	54 fl.oz	53 fl.oz	1.9		
[illegible]	238 fl.oz	238 fl.oz	238 fl.oz	0.0		
D[illegible]D	372 fl.oz	372 fl.oz	370 fl.oz	0.5		

DryAggs: 22413 lb
Cems: 5335 lb
Waters: 2203 lb
Total: 30487 lb
Wat/Cem: 0.413
Add: 11 G

12:14:28p 08/26/15
Bottles Empty

	Start	End
AGG	0	20 lb
CEM	0	0 lb

Received By_____

Center Redi Mix Inc.
P.O. Box 608
1504 W. Hwy 112
Center CO 81125
719-754-2744

Ticket No. 34597

Moltz Constructors Inc.
P.O. Box 1030
Cody WY 82414

Continental Dam Project
Creede West Hwy 149 past Clear
Creek past mi mark 48
Left Rd 513 S mi to job site

Today 8.00 yd

11:22:51a 8.00 yd 589.00 yd 3765

08/26/15 1 Ken Smith 3.00 in 5.00

8.00	4500PSI LH	7 Sack Class DP Concrete	589.00	117.75	942.00
1.00	DELIVERY	Delivery Charge	589.00	72.00	576.00

SubTotal $ 1518.00
Tax 2.900 27.32
Total $ 1545.32

11:29:42a

Order Total 108706.39

Ticket No. 34597

Batch size 8.00 yd

-Material-	-Indication-	- AVDP EQU -	- Targets --	-% Tol-	WatFree	%Moist
3\4 AGG	12860 lb	12860 lb	12880 lb	-0.2	-321.5	0.00
SAND	5380 lb	5380 lb	5220 lb	3.1*	443.4	11.16
SAND3	5100 lb	5100 lb	5140 lb	-0.8	348.0	9.47
I-II	4240 lb	4240 lb	4225 lb	0.4		
FLYASH	1080 lb	1080 lb	1055 lb	2.4*		
H20	207 G	207 G	207 G	0.0	1727.4	
MB AE90	54 fl.oz	54 fl.oz	53 fl.oz	1.9		
322N	238 fl.oz	238 fl.oz	238 fl.oz	0.0		
[illegible]D	372 fl.oz	372 fl.oz	370 fl.oz	0.5		

DryAggs: 22359 lb
Cems: 5320 lb
Waters: 2197 lb
Total: 30387 lb
Wat/Cem: 0.413
Add: 11 G

11:29:42a 08/26/15
Bottles Empty

	Start	End
AGG	0	20 lb
CEM	0	0 lb

Received By_____

Center Redi Mix Inc.
P.O. Box 608
1504 W. Hwy 112
Center CO 81125
719-754-2744

Ticket No. 34585

Moltz Constructors Inc.
P.O. Box 1030
Cody WY 82414

Continental Dam Project
Creede West Hwy 149 past Clear
Creek past mi mark 48
Left Rd 513 S mi to job site

Today 24.00 yd

11:38:23a 8.00 yd 558.00 yd 33JV

08/24/15 3 Ken Smith 3.00 in 5.00

8.00	4500PSI LH	7 Sack Class DP Concrete	558.00	117.75	942.00
1.00	DELIVERY	Delivery Charge	558.00	72.00	576.00

SubTotal $ 1518.00
Tax 2.900 27.32
Total $ 1545.32

11:45:57a

Order Total 107161.07

Ticket No. 34585

Batch size 8.00 yd

-Material-	-Indication-	- AVDP EQU -	- Targets	-% Tol-	WatFree	%Moist
3\4 AGG	12800 lb	12800 lb	12840 lb	-0.3	-352.0	0.00
SAND	5320 lb	5320 lb	5160 lb	3.1*	369.2	10.68
SAND3	5080 lb	5080 lb	5120 lb	-0.8	316.9	9.85
I-II	4270 lb	4270 lb	4225 lb	1.1*		
FLYASH	1090 lb	1090 lb	1055 lb	3.3*		
H20	224 G	224 G	224 G	0.0	1869.3	
MB AE90	54 fl.oz	54 fl.oz	53 fl.oz	1.9		
[illegible]N	238 fl.oz	238 fl.oz	238 fl.oz	0.0		
[illegible]VO	374 fl.oz	374 fl.oz	370 fl.oz	1.1		

DryAggs: 22231 lb
Cems: 5360 lb
Waters: 2203 lb
Total: 30429 lb
Wat/Cem: 0.411
Add: 12 G

11:45:57a 08/24/15
Bottles Empty

	Start	End
AGG	0	0 lb
CEM	0	0 lb

Received By_____

Center Redi Mix Inc.
P.O. Box 608
1504 W. Hwy 112
Center CO 81125
719-754-2744

Ticket No. 34584

Moltz Constructors Inc.
P.O. Box 1030
Cody WY 82414

Continental Dam Project
Creede West Hwy 149 past Clear
Creek past mi mark 48
Left Rd 513 5 mi to job site

Today 16.00 yd

11:09:24a 8.00 yd 558.00 yd 30DC

08/24/15 2 Ken Smith 3.00 in 5.00

8.00	4500PSI LH	7 Sack Class DP Concrete	558.00	117.75	942.00
00	DELIVERY	Delivery Charge	558.00	72.00	576.00

SubTotal $ 1518.00
Tax 2.900 27.32
Total $ 1545.32

11:17:14a

Order Total 105615.75

Ticket No. 34584

Batch size 8.00 yd

-Material-	-Indication-	- AVDP EQU -	- Targets --	-% Tol-	WatFree	%Moist
3\4 AGG	12820 lb	12820 lb	12840 lb	-0.2	-352.5	0.00
SAND	5260 lb	5260 lb	5160 lb	1.9	371.0	10.82
AND3	5060 lb	5060 lb	5100 lb	-0.8	306.8	9.65
II	4275 lb	4275 lb	4225 lb	1.2*		
ASH	1100 lb	1100 lb	1055 lb	4.3*		
	225 G	225 G	225 G	0.0	1877.6	
90	53 fl.oz	53 fl.oz	53 fl.oz	0.0		
	238 fl.oz	238 fl.oz	238 fl.oz	0.0		
	371 fl.oz	371 fl.oz	370 fl.oz	0.3		

DryAggs: 22181 lb
Cems: 5375 lb
Waters: 2203 lb
Total: 30393 lb
Wat/Cem: 0.410
Add: 13 G

11:17:14a 08/24/15
Bottles Empty

	Start	End
AGG	0	0 lb
CEM	0	0 lb

By_____

Center Redi Mix Inc.
P.O. Box 608
1504 W. Hwy 112
Center CO 81125
719-754-2744

Ticket No. 34582

Moltz Constructors Inc.
P.O. Box 1030
Cody WY 82414

Continental Dam Project
Creede West Hwy 149 past Clear
Creek past mi mark 48
Left Rd 513 5 mi to job site

Today 8.00 yd

10:11:32a	8.00 yd	558.00 yd	37GS	
08/24/15	1	Ken Smith	3.00 in	5.00

8.00	4500PSI LH	7 Sack Class DP Concrete	558.00	117.75	942.00
00	DELIVERY	Delivery Charge	558.00	72.00	576.00

SubTotal $	1518.00
Tax 2.900	27.32
Total $	1545.32

10:18:29a

Order Total 104070.43

Ticket No. 34582

Batch size 8.00 yd

-Material-	-Indication-	- AVDP EQU -	- Targets --	-% Tol-	WatFree	%Moist
3\4 AGG	12780 lb	12780 lb	12840 lb	-0.5	-351.5	0.00
SAND	5360 lb	5360 lb	5180 lb	3.5*	394.6	11.19
SAND3	5080 lb	5080 lb	5120 lb	-0.8	313.3	9.77
I-II	4275 lb	4275 lb	4225 lb	1.2*		
FLYASH	1090 lb	1090 lb	1055 lb	3.3*		
H20	221 G	221 G	221 G	0.0	1844.2	
B AE90	54 fl.oz	54 fl.oz	53 fl.oz	1.9		
2N	238 fl.oz	238 fl.oz	238 fl.oz	0.0		
VD	372 fl.oz	372 fl.oz	370 fl.oz	0.5		

DryAggs:	22229 lb
Cems:	5365 lb
Waters:	2201 lb
Total:	30429 lb
Wat/Cem:	0.410
Add:	12 G

ed By_____

10:18:29a 08/24/15
Bottles Empty

	Start	End
AGG	0	0 lb
CEM	0	0 lb

Center Redi Mix Inc.
P.O. Box 608
1504 W. Hwy 112
Center CO 81125
719-754-2744

Ticket No. 34578

Moltz Constructors Inc.
P.O. box 1030
Cody WY 82414

Continental Dam Project
Creede West Hwy 149 past Clear
Creek past mi mark 48
Left Rd 513 5 mi to job site

Today 24.00 yd

11:53:43a	8.00 yd	534.00 yd	33JV
08/21/15	3	Ken Smith	3.00 in 5.00

00	4500PSI LH	7 Sack Class DP Concrete	534.00	117.75	942.00
00	DELIVERY	Delivery Charge	534.00	72.00	576.00

SubTotal $	1518.00
Tax 2.900	27.32
Total $	1545.32

12:01:48p

Order Total 102525.11

Ticket No. 34578

Batch size 8.00 yd

Material	Indication	AVDP EQU	Targets	-% Tol	WatFree	%Moist
4 AGG	12840 lb	12840 lb	12880 lb	-0.3	-321.0	0.00
ND	5300 lb	5300 lb	5180 lb	2.3	388.0	11.14
D3	5080 lb	5080 lb	5120 lb	-0.8	309.6	9.69
	4235 lb	4235 lb	4225 lb	0.2		
SH	1060 lb	1060 lb	1055 lb	0.5		
	218 G	218 G	218 G	0.0	1819.2	
0	54 fl.oz	54 fl.oz	53 fl.oz	1.9		
	238 fl.oz	238 fl.oz	238 fl.oz	0.0		
	373 fl.oz	373 fl.oz	370 fl.oz	0.8		

DryAggs:	22240 lb
Cems:	5295 lb
Waters:	2196 lb
Total:	30334 lb
Wat/Cem:	0.415
Add:	10 G

12:01:48p 08/21/15
Bottles Empty

	Start	End
AGG	0	20 lb
CEM	0	0 lb

y_____

Center Redi Mix Inc.
P.O. Box 608
1504 W. Hwy 112
Center CO 81125
719-754-2744

Ticket No. 34551

Moltz Constructors Inc.
P.O. Box 1030
Cody WY 82414

Continental Dam Project
Creede West Hwy 149 past Clear
Creek past mi mark 48
Left Rd 513 5 mi to job site

Today 16.00 yd

11:24:00a 8.00 yd 468.00 yd 33JV

08/18/15 2 Ken Smith 3.00 in 5.00

00	4500PSI LH	7 Sack Class DP Concrete	468.00	117.75	942.00
.00	DELIVERY	Delivery Charge	468.00	72.00	576.00

SubTotal $ 1518.00
Tax 2.900 27.32
Total $ 1545.32

11:31:40a

Order Total $88424.10

icket No. 34551

Batch size 8.00 yd

-Material-	-Indication-	- AVDP EQU -	- Targets ---	-% Tol-	WatFree	%Moist
3\4 AGG	12840 lb	12840 lb	12880 lb	-0.3	-321.0	0.00
SAND	5320 lb	5320 lb	5180 lb	2.7*	389.5	11.14
SAND3	5100 lb	5100 lb	5140 lb	-0.8	338.7	10.33
I-II	4245 lb	4245 lb	4225 lb	0.5		
FLYASH	1100 lb	1100 lb	1055 lb	4.3*		
H20	215 G	215 G	215 G	0.0	1794.2	
MB AE90	50 fl.oz	50 fl.oz	50 fl.oz	0.0		
[illegible]	238 fl.oz	238 fl.oz	238 fl.oz	0.0		
DELVD	372 fl.oz	372 fl.oz	370 fl.oz	0.5		

DryAggs: 22250 lb
Cems: 5345 lb
Waters: 2201 lb
Total: 30399 lb
Wat/Cem: 0.412
Add: 11 G

11:31:40a 08/18/15
Bottles Empty

	Start	End
AGG	0	40 lb
CEM	0	0 lb

eceived By

Center Redi Mix Inc.
P.O. Box 608
1504 W. Hwy 112
Center CO 81125
719-754-2744

Ticket No. 34550

Moltz Constructors Inc.
P.O. Box 1030
Cody WY 82414

Continental Dam Project
Creede West Hwy 149 past Clear
Creek past mi mark 48
Left Rd 513 5 mi to job site

Today 8.00 yd

10:40:03a 8.00 yd 468.00 yd 3765

08/18/15 1 Ken Smith 3.00 in 5.00

.00	4500PSI LH	7 Sack Class DP Concrete	468.00	117.75	942.00
8.00	DELIVERY	Delivery Charge	468.00	72.00	576.00

AIR 4.4
Slump 2

SubTotal $ 1518.00
Tax 2.900 27.32
Total $ 1545.32

10:46:52a

Order Total $86878.78

icket No. 34550

Batch size 8.00 yd

-Material-	-Indication-	- AVDP EQU -	- Targets -	-% Tol-	WatFree	%Moist
3\4 AGG	12840 lb	12840 lb	12880 lb	-0.3	-321.0	0.00
SAND	5380 lb	5380 lb	5180 lb	3.9*	403.3	11.35
SAND3	5100 lb	5100 lb	5140 lb	-0.8	336.6	10.28
I-II	4265 lb	4265 lb	4225 lb	0.9		
FLYASH	1090 lb	1090 lb	1055 lb	3.3*		
H20	213 G	213 G	213 G	0.0	1777.5	
MB-AE90	51 fl.oz	51 fl.oz	50 fl.oz	2.0		
	240 fl.oz	240 fl.oz	238 fl.oz	0.8		
DELVO	372 fl.oz	372 fl.oz	370 fl.oz	0.5		

DryAggs: 22296 lb
Cems: 5355 lb
Waters: 2196 lb
Total: 30452 lb
Wat/Cem: 0.410
Add: 12 G

10:46:52a 08/18/15
Bottles Empty

	Start	End
AGG	0	20 lb
CEM	0	0 lb

eceived By

Bot Liff

Center Redi Mix Inc.
P.O. Box 608
1504 W. Hwy 112
Center CO 81125
719-754-2744

Ticket No. 34546

Moltz Constructors Inc.
P.O. Box 1030
Cody WY 82414

Continental Dam Project
Creede West Hwy 149 past Clear
Creek past mi mark 48
Left Rd 513 5 mi to job site

Today 23.00 yd

12:39:42p 7.00 yd 445.00 yd 37GS

08/17/15 3 Ken Smith 3.00 in 5.00

.00	4500PSI LH	7 Sack Class DP Concrete	445.00	117.75	824.25
.00	DELIVERY	Delivery Charge	445.00	72.00	504.00

SubTotal $	1328.25
Tax 2.900	23.90
Total $	1352.15

12:46:10p

Order Total $85333.46

Ticket No. 34546

Batch size 7.00 yd

-Material-	-Indication-	- AVDP EQU -	- Targets --	-% Tol-	WatFree	%Moist
3\4 AGG	11220 lb	11220 lb	11260 lb	-0.4	-280.5	0.00
SAND	4760 lb	4760 lb	4540 lb	4.8*	350.9	11.20
SAND3	4480 lb	4480 lb	4520 lb	-0.9	319.2	10.90
I-II	3710 lb	3710 lb	3695 lb	0.4		
FLYASH	960 lb	960 lb	925 lb	3.8*		
H20	184 G	184 G	184 G	0.0	1535.5	
MB AE90	43 fl.oz	43 fl.oz	42 fl.oz	2.4		
[illegible]N	208 fl.oz	208 fl.oz	208 fl.oz	0.0		
[illegible]VO	325 fl.oz	325 fl.oz	323 fl.oz	0.6		

DryAggs: 19540 lb
Cems: 4670 lb
Waters: 1925 lb
Total: 26666 lb
Wat/Cem: 0.412
Add: 10 G

12:46:10p 08/17/15
Bottles Empty

	Start	End
AGG	0	20 lb
CEM	0	0 lb

Received By [signature]

Center Redi Mix Inc.
P.O. Box 608
1504 W. Hwy 112
Center CO 81125
719-754-2744

Ticket No. 34545

Moltz Constructors Inc.
P.O. Box 1030
Cody WY 82414

Continental Dam Project
Creede West Hwy 149 past Clear
Creek past mi mark 48
Left Rd 513 5 mi to job site

Today 16.00 yd

12:11:28p 8.00 yd 445.00 yd 30DC

08/17/15 2 Ken Smith 3.00 in 5.00

.00	4500PSI LH	7 Sack Class DP Concrete	445.00	117.75	942.00
.00	DELIVERY	Delivery Charge	445.00	72.00	576.00

SubTotal $ 1518.00
Tax 2.900 27.32
Total $ 1545.32

12:18:10p

Order Total $83981.31

Ticket No. 34545

Batch size 8.00 yd

-Material-	-Indication-	- AVDP EQU -	- Targets --	-% Tol-	WatFree	%Moist
3\4 AGG	12840 lb	12840 lb	12880 lb	-0.3	-321.0	0.00
SAND	5360 lb	5360 lb	5180 lb	3.5*	396.8	11.23
SAND3	5140 lb	5140 lb	5180 lb	-0.8	369.4	10.98
I-II	4225 lb	4225 lb	4225 lb	0.0		
FLYASH	1095 lb	1095 lb	1055 lb	3.8*		
H20	210 G	210 G	210 G	0.0	1752.4	
MB_AE90	48 fl.oz	48 fl.oz	48 fl.oz	0.0		
[illegible]	238 fl.oz	238 fl.oz	238 fl.oz	0.0		
DELVO	372 fl.oz	372 fl.oz	370 fl.oz	0.5		

DryAggs: 22290 lb
Cems: 5320 lb
Waters: 2198 lb
Total: 30412 lb
Wat/Cem: 0.413
Add: 11 G

12:18:10p 08/17/15
Bottles Empty

	Start	End
AGG	0	0 lb
CEM	0	0 lb

Received By [signature]

Center Redi Mix Inc.
P.O. Box 608
1504 W. Hwy 112
Center CO 81125
719-754-2744

Ticket No. 34544

Moltz Constructors Inc.
P.O. Box 1030
Cody WY 82414

Continental Dam Project
Creede West Hwy 149 past Clear
Creek past mi mark 48
Left Rd 513 5 mi to job site

Today 8.00 yd

11:12:55a 8.00 yd 445.00 yd 33JV

08/17/15 1 Ken Smith 3.00 in 5.00

.00	4500PSI LH	7 Sack Class DP Concrete	445.00	117.75	942.00
.00	DELIVERY	Delivery Charge	445.00	72.00	576.00

SubTotal $ 1518.00
Tax 2.900 27.32
Total $ 1545.32

11:19:33a

Order Total $82435.99

icket No. 34544

Batch size 8.00 yd

-Material-	-Indication-	- AVDP EQU -	- Targets --	-% Tol-	WatFree	%Moist
3\4 AGG	12840 lb	12840 lb	12880 lb	-0.3	-321.0	0.00
SAND	5360 lb	5360 lb	5180 lb	3.5*	399.0	11.28
SAND3	5140 lb	5140 lb	5180 lb	-0.8	380.5	11.23
I-II	4250 lb	4250 lb	4225 lb	0.6		
FLYASH	1105 lb	1105 lb	1055 lb	4.7*		
H20	208 G	208 G	208 G	0.0	1735.8	
MB AE90	48 fl.oz	48 fl.oz	48 fl.oz	0.0		
[illegible]	238 fl.oz	238 fl.oz	238 fl.oz	0.0		
D[illegible]0	372 fl.oz	372 fl.oz	370 fl.oz	0.5		

DryAggs: 22277 lb
Cems: 5355 lb
Waters: 2194 lb
Total: 30431 lb
Wat/Cem: 0.410
Add: 13 G

11:19:33a 08/17/15
Bottles Empty

	Start	End
AGG	0	20 lb
CEM	0	0 lb

eceived By_____

Center Redi Mix Inc.
P.O. Box 608
1504 W. Hwy 112
Center CO 81125
719-754-2744

Ticket No. 34540

Moltz Constructors Inc.
P.O. Box 1030
Cody WY 82414

Continental Dam Project
Creede West Hwy 149 past Clear
Creek past mi mark 48
Left Rd 513 5 mi to job site

Today 37.00 yd

12:16:39p 7.00 yd 422.00 yd 31KS

08/14/15 S Ken Smith 3.00 in 5.00

.00	4500PSI LH	7 Sack Class DP Concrete	422.00	117.75	824.25
.00	DELIVERY	Delivery Charge	422.00	72.00	504.00

SubTotal $ 1328.25
Tax 2.900 23.90
Total $ 1352.15

12:22:30p

Order Total $80890.67

icket No. 34540

Batch size 7.00 yd

-Material-	-Indication-	- AVDP EQU -	- Targets --	-% Tol-	WatFree	%Moist
3\4 AGG	11240 lb	11240 lb	11260 lb	-0.2	-281.0	0.00
SAND	4700 lb	4780 lb	4520 lb	5.8*	336.1	10.79
SAND3	4460 lb	4460 lb	4500 lb	-0.9	299.9	10.42
I-II	3760 lb	3760 lb	3695 lb	1.8*		
FLYASH	955 lb	955 lb	925 lb	3.2*		
H20	188 G	188 G	188 G	0.0	1568.9	
MB AE90	42 fl.oz	42 fl.oz	42 fl.oz	0.0		
[illegible]N	208 fl.oz	208 fl.oz	208 fl.oz	0.0		
[illegible]O	325 fl.oz	325 fl.oz	323 fl.oz	0.6		

DryAggs: 19593 lb
Cems: 4715 lb
Waters: 1924 lb
Total: 26764 lb
Wat/Cem: 0.408
Adds: 12 G

12:22:30p 08/14/15
Bottles Empty
-----Start---End-----
AGG 0 0 lb
CEM 0 0 lb

eceived By

Center Redi Mix Inc.
P.O. Box 600
1504 W. Hwy 112
Center CO 81125
719-754-2744

Ticket No. 34539

Moltz Constructors Inc.
P.O. Box 1030
Cody WY 82414

Continental Dam Project
Creede West Hwy 149 past Clear
Creek past mi mark 48
Left Rd 513 5 mi to job site

Today 30.00 yd

11:50:09a 7.50 yd 422.00 yd 33JV

08/14/15 4 Ken Smith 3.00 in 5.00

7.50	4500PSI LH	7 Sack Class DP Concrete	422.00	117.75	883.13
7.50	DELIVERY	Delivery Charge	422.00	72.00	540.00

SubTotal $ 1423.13
Tax 2.900 25.61
Total $ 1448.74

11:56:36a

Order Total $79538.52

Ticket No. 34539

Batch size 7.50 yd

-Material-	-Indication-	- AVDP EQU -	- Targets --	-% Tol-	Wat	Free	%Moist
3\4 AGG	12040 lb	12040 lb	12080 lb	-0.3		-301.0	0.00
SAND	5180 lb	5180 lb	4840 lb	7.0*		370.1	10.93
SAND3	4740 lb	4740 lb	4780 lb	-0.8		289.4	9.70
I-II	3980 lb	3980 lb	3960 lb	0.5			
FLYASH	1025 lb	1025 lb	990 lb	3.5*			
H20	203 G	203 G	203 G	0.0		1694.0	
MB AE90	45 fl.oz	45 fl.oz	45 fl.oz	0.0			
[illegible]	222 fl.oz	222 fl.oz	222 fl.oz	0.0			
D[illegible]	350 fl.oz	350 fl.oz	347 fl.oz	0.9			

DryAggs: 21031 lb
Cems: 5005 lb
Waters: 2053 lb
Total: 28659 lb
Wat/Cem: 0.410
Add: 12 G

Received By_____

11:56:36a 08/14/15
Bottles Empty

	Start	End	
AGG	0	0	lb
CEM	0	0	lb

Center Redi Mix Inc.
P.O. Box 608
1504 W. Hwy 112
Center CO 81125
719-754-2744

Ticket No. 34539

Moltz Constructors Inc.
P.O. Box 1030
Cody WY 82414

Continental Dam Project
Creede West Hwy 149 past Clear
Creek past mi mark 48
Left Rd 513 5 mi to job site

Today 30.00 yd

11:50:09a 7.50 yd 422.00 yd 33JV

08/14/15 4 Ken Smith 3.00 in 5.00

.50	4500PSI LH	7 Sack Class DP Concrete	422.00	117.75	883.13
7.50	DELIVERY	Delivery Charge	422.00	72.00	540.00

SubTotal $ 1423.13
Tax 2.900 25.61
Total $ 1448.74

11:56:36a

Order Total $79538.52

icket No. 34539

Batch size 7.50 yd

-Material-	-Indication-	- AVDP EQU -	- Targets --	-% Tol-	Wat	Free	%Moist
3\4 AGG	12040 lb	12040 lb	12080 lb	-0.3	-301.0		0.00
SAND	5180 lb	5180 lb	4840 lb	7.0*	370.1		10.93
SAND3	4740 lb	4740 lb	4780 lb	-0.8	289.4		9.70
I-II	3980 lb	3980 lb	3960 lb	0.5			
FLYASH	1025 lb	1025 lb	990 lb	3.5*			
H20	203 G	203 G	203 G	0.0	1694.0		
MP AE90	45 fl.oz	45 fl.oz	45 fl.oz	0.0			
[illegible]	222 fl.oz	222 fl.oz	222 fl.oz	0.0			
DELVO	350 fl.oz	350 fl.oz	347 fl.oz	0.9			

DryAggs: 21031 lb
Cems: 5005 lb
Waters: 2053 lb
Total: 28659 lb
Wat/Cem: 0.410
Add: 12 G

11:56:36a 08/14/15
Bottles Empty

	Start	End
AGG	0	0 lb
CEM	0	0 lb

eceived By_____

Center Redi Mix Inc.
P.O. Box 608
1504 W. Hwy 112
Center CO 81125
719-754-2744

Ticket No. 34538

Moltz Constructors Inc.
P.O. Box 1030
Cody WY 82414

Continental Dam Project
Creede West Hwy 149 past Clear
Creek past mi mark 48
Left Rd 513 5 mi to job site

Today 22.50 yd

11:16:49a 7.50 yd 422.00 yd 30DC

08/14/15 3 Ken Smith 3.00 in 5.00

7.50	4500PSI LH	7 Sack Class DP Concrete	422.00	117.75	883.13
7.50	DELIVERY	Delivery Charge	422.00	72.00	540.00

SubTotal $ 1423.13
Tax 2.900 25.61
Total $ 1448.74

11:25:44a

Order Total $78089.78

Ticket No. 34538

Batch size 7.50 yd

-Material-	-Indication-	- AVDP EQU -	- Targets -	-% Tol-	WatFree	%Moist
3\4 AGG	12040 lb	12040 lb	12080 lb	-0.3	-301.0	0.00
SAND	5120 lb	5120 lb	4840 lb	5.8*	365.3	10.91
SAND3	4740 lb	4740 lb	4780 lb	-0.8	286.5	9.63
I-II	3990 lb	3990 lb	3960 lb	0.8		
FLYASH	1010 lb	1010 lb	990 lb	2.0*		
H20	205 G	205 G	205 G	0.0	1710.7	
MB AE90	46 fl.oz	46 fl.oz	45 fl.oz	2.2		
[illegible]	222 fl.oz	222 fl.oz	222 fl.oz	0.0		
[illegible]OD	349 fl.oz	349 fl.oz	347 fl.oz	0.6		

DryAggs: 20980 lb
Cems: 5000 lb
Waters: 2061 lb
Total: 28611 lb
Wat/Cem: 0.412
Add: 10 G

11:25:44a 08/14/15
Bottles Empty

	Start	End
AGG	0	0 lb
CEM	0	0 lb

Received By_____

Center Redi Mix Inc.
P.O. Box 608
1504 W. Hwy 112
Center CO 81125
719-754-2744

Ticket No. 34537

Moltz Constructors Inc.
P.O. Box 1030
Cody WY 82414

Continental Dam Project
Creede West Hwy 149 past Clear
Creek past mi mark 48
Left Rd 513 5 mi to job site

Today 15.00 yd

10:50:51a 7.50 yd 422.00 yd 32JN

08/14/15 2 Ken Smith 3.00 in 5.00

.50	4500PSI LH	7 Sack Class DP Concrete	422.00	117.75	883.13
.50	DELIVERY	Delivery Charge	422.00	72.00	540.00

SubTotal $ 1423.13
Tax 2.900 25.61
Total $ 1448.74

10:58:11a

Order Total $76641.04

Ticket No. 34537

Batch size 7.50 yd

-Material-	-Indication-	- AVDP EQU -	- Targets --	-% Tol-	WatFree	%Moist
3\4 AGG	12040 lb	12040 lb	12080 lb	-0.3	-301.0	0.00
SAND	5120 lb	5120 lb	4840 lb	5.8*	365.3	10.91
SAND3	4740 lb	4740 lb	4780 lb	-0.8	281.6	9.51
I-II	3985 lb	3985 lb	3960 lb	0.6		
FLYASH	1000 lb	1000 lb	990 lb	1.0		
H20	205 G	205 G	205 G	0.0	1710.7	
MB AE90	46 fl.oz	46 fl.oz	45 fl.oz	2.2		
[illegible]	222 fl.oz	222 fl.oz	222 fl.oz	0.0		
[illegible]90	349 fl.oz	349 fl.oz	347 fl.oz	0.6		

DryAggs: 20985 lb
Cems: 4985 lb
Waters: 2057 lb
Total: 28596 lb
Wat/Cem: 0.413
Add: 10 G

10:58:11a 08/14/15
Bottles Empty

	Start	End
AGG	0	0 lb
CEM	0	0 lb

eceived By_____

Center Redi Mix Inc.
P.O. Box 608
1504 W. Hwy 112
Center CO 81125
719-754-2744

Ticket No. 34536

Moltz Constructors Inc.
P.O. Box 1030
Cody WY 82414

Continental Dam Project
Creede West Hwy 149 past Clear
Creek past mi mark 48
Left Rd 513 5 mi to job site

Today 7.50 yd

10:10:18a	7.50 yd	422.00 yd	37GS	
08/14/15	1	Ken Smith	3.00 in	5.00

7.50	4500PSI LH	7 Sack Class DP Concrete	422.00	117.75	883.13
7.50	DELIVERY	Delivery Charge	422.00	72.00	540.00

Air 5.2

Slump 2 3/4

SubTotal $	1423.13
Tax 2.900	25.61
Total $	1448.74

10:17:22a

Order Total $75192.30

Ticket No. 34536

Batch size 7.50 yd

-Material-	-Indication-	- AVDP EQU -	- Targets --	-% Tol-	WatFree	%Moist
3\4 AGG	12040 lb	12040 lb	12080 lb	-0.3	-301.0	0.00
SAND	5100 lb	5100 lb	4860 lb	4.9*	379.7	11.28
SAND3	4720 lb	4720 lb	4760 lb	-0.8	274.6	9.36
I-II	4015 lb	4015 lb	3960 lb	1.4*		
FLYASH	1005 lb	1005 lb	990 lb	1.5*		
H20	204 G	204 G	204 G	0.0	1702.4	
MB AE90	46 fl.oz	46 fl.oz	45 fl.oz	2.2		
N	222 fl.oz	222 fl.oz	222 fl.oz	0.0		
VO	349 fl.oz	349 fl.oz	347 fl.oz	0.6		

DryAggs: 20939 lb
Cems: 5020 lb
Waters: 2056 lb
Total: 28582 lb
Wat/Cem: 0.409
Add: 12 G

10:17:22a 08/14/15
Bottles Empty

	Start	End
AGG	0	0 lb
CEM	0	0 lb

eceived By Both Pit

Center Redi Mix Inc.
P.O. Box 608
1504 W. Hwy 112
Center CO 81125
719-754-2744

Ticket No. 34528

Moltz Constructors Inc.
P.O. Box 1030
Cody WY 82414

Continental Dam Project
Creede West Hwy 149 past Clear
Creek past mi mark 48
Left Rd 513 5 mi to job site

Today 32.00 yd

12:49:49p 8.00 yd 385.00 yd 31JN

08/13/15 4 Ken Smith 3.00 in 5.00

.00	4500PSI LH	7 Sack Class DP Concrete	385.00	117.75	942.00
.00	DELIVERY	Delivery Charge	385.00	72.00	576.00

SubTotal $ 1518.00
Tax 2.900 27.32
Total $ 1545.32

12:57:47p

Order Total $73743.56

icket No. 34528

Batch size 8.00 yd

-Material-	-Indication-	- AVDP EQU -	- Targets -	+-% Tol-	WatFree	%Moist
3\4 AGG	12860 lb	12860 lb	12880 lb	-0.2	-321.5	0.00
SAND	5420 lb	5420 lb	5180 lb	4.6*	402.9	11.27
SAND3	5040 lb	5040 lb	5080 lb	-0.8	206.4	9.21
I-II	4280 lb	4280 lb	4225 lb	1.3*		
FLYASH	1080 lb	1080 lb	1055 lb	2.4*		
H20	219 G	219 G	219 G	0.0	1827.6	
MB AE90	48 fl.oz	48 fl.oz	48 fl.oz	0.0		
	238 fl.oz	238 fl.oz	238 fl.oz	0.0		
D	371 fl.oz	371 fl.oz	370 fl.oz	0.3		

DryAggs: 22346 lb
Cems: 5360 lb
Waters: 2195 lb
Total: 30508 lb
Wat/Cem: 0.410
Add: 13 G

12:57:47p 08/13/15
Bottles Empty

	Start	End
AGG	0	20 lb
CEM	0	0 lb

eceived By

Center Redi-Mix Inc
P.O. Box 608
1504 W. Hwy 112
Center CO 81125
719-754-2744

Ticket No. 34527

Moltz Constructors Inc.
P.O. Box 1030
Cody WY 82414

Continental Dam Project
Creede West Hwy 149 past Clear
Creek past mi mark 48
Left Rd 513 5 mi to job site

Today 24.00 yd

12:20:38p 8.00 yd 385.00 yd 33JV

08/13/15 3 Ken Smith 3.00 in 5.00

.00	4500PSI LH	7 Sack Class DP Concrete	385.00	117.75	942.00
.00	DELIVERY	Delivery Charge	385.00	72.00	576.00

SubTotal $ 1518.00
Tax 2.900 27.32
Total $ 1545.32

12:27:07p

Order Total $72198.24

icket No. 34527

Batch size 8.00 yd

-Material-	-Indication-	- AVDP EQU -	- Targets -	-% Tol-	WatFree	%Moist
3\4 AGG	12840 lb	12840 lb	12880 lb	-0.3	-321.0	0.00
SAND	5340 lb	5340 lb	5180 lb	3.1*	392.0	11.16
SAND3	5040 lb	5040 lb	5080 lb	-0.8	270.3	8.84
I-II	4245 lb	4245 lb	4225 lb	0.5		
FLYASH	1080 lb	1080 lb	1055 lb	2.4*		
H20	223 G	223 G	223 G	0.0	1860.9	
MB AE90	49 fl.oz	49 fl.oz	48 fl.oz	2.1		
3	238 fl.oz	238 fl.oz	238 fl.oz	0.0		
DELVD	375 fl.oz	375 fl.oz	370 fl.oz	1.4		

DryAggs: 22275 lb
Cems: 5325 lb
Waters: 2202 lb
Total: 30406 lb
Wat/Cem: 0.414
Add: 10 G

12:27:07p 08/13/15
Bottles Empty

	Start	End
AGG	-40	20 lb
CEM	0	0 lb

eceived By

Center Redi Mix Inc.
P.O. Box 608
1504 W. Hwy 112
Center CO 81125
719-754-2744

Ticket No. 34526

Moltz Constructors Inc.
P.O. Box 1030
Cody WY 82414

Continental Dam Project
Creede West Hwy 149 past Clear
Creek past mi mark 48
Left Rd 513 5 mi to job site

Today 16.00 yd

11:51:38a 8.00 yd 385.00 yd 3765

08/13/15 2 Ken Smith 3.00 in 5.00

8.00	4500PSI LH	7 Sack Class DP Concrete	385.00	117.75	942.00
8.00	DELIVERY	Delivery Charge	385.00	72.00	576.00

AIR 5.5 5.1

SLump 3.25 3.5

11:58:32a 2g Rebuild

SubTotal $ 1518.00
Tax 2.900 27.32
Total $ 1545.32

Order Total $70652.92

Ticket No. 34526

Batch size 8.00 yd

-Material-	-Indication-	- AVDP EQU -	- Targets -	-% Tol-	WatFree	%Moist
3\4 AGG	12860 lb	12860 lb	12880 lb	-0.2	-321.5	0.00
SAND	5260 lb	5260 lb	5180 lb	1.5	387.2	11.19
SAND3	5060 lb	5060 lb	5100 lb	-0.8	306.0	9.47
I-II	4220 lb	4220 lb	4225 lb	-0.1		
FLYASH	1075 lb	1075 lb	1055 lb	1.9*		
H20	219 G	219 G	219 G	0.0	1827.6	
MB AE90	49 fl.oz	49 fl.oz	48 fl.oz	2.1		
[illegible]	238 fl.oz	238 fl.oz	238 fl.oz	0.0		
[illegible]D	372 fl.oz	372 fl.oz	370 fl.oz	0.5		

DryAggs: 22213 lb
Cems: 5295 lb
Waters: 2199 lb
Total: 30303 lb
Wat/Cem: 0.415
Add: 9 G

11:58:32a 08/13/15
Bottles Empty

	Start	End	
AGG	0	0	lb
CEM	0	0	lb

Received By [signature] Bot Lift

Center Redi Mix Inc.
P.O. Box 608
1504 W. Hwy 112
Center CO 81125
719-754-2744

Ticket No. 34525

Moltz Constructors Inc.
P.O. Box 1030
Cody WY 82414

Continental Dam Project
Creede West Hwy 149 past Clear
Creek past mi mark 48
Left Rd 513 5 mi to job site

Today 8.00 yd

11:08:11a 8.00 yd 385.00 yd 30DC

08/13/15 1 Ken Smith 3.00 in 5.00

8.00	4500PSI LH	7 Sack Class DP Concrete	385.00	117.75	942.00
8.00	DELIVERY	Delivery Charge	385.00	72.00	576.00

SubTotal $ 1518.00
Tax 2.900 27.32
Total $ 1545.32

11:14:57a

Order Total $69107.60

Ticket No. 34525

Batch size 8.00 yd

-Material-	-Indication-	- AVDP EQU -	- Targets -	-% Tol-	WatFree	%Moist
3\4 AGG	12820 lb	12820 lb	12880 lb	-0.5	-320.5	0.00
SAND	5400 lb	5400 lb	5200 lb	3.8*	408.8	11.11
SAND3	5100 lb	5100 lb	5140 lb	-0.8	325.6	9.76
I-II	4290 lb	4290 lb	4225 lb	1.5*		
FLYASH	1090 lb	1090 lb	1055 lb	3.3*		
H20	214 G	214 G	214 G	0.0	1785.8	
MB AE90	48 fl.oz	48 fl.oz	48 fl.oz	0.0		
322N	238 fl.oz	238 fl.oz	238 fl.oz	0.0		
D[illegible]	373 fl.oz	373 fl.oz	370 fl.oz	0.8		

DryAggs: 22327 lb
Cems: 5380 lb
Waters: 2200 lb
Total: 30486 lb
Wat/Cem: 0.409
Add: -3 G

11:14:57a 08/13/15
Bottles Empty

	Start	End
AGG	0	20 lb
CEM	0	0 lb

Received By [signature] Bot Lift

Center Redi Mix Inc.
P.O. Box 608
1504 W. Hwy 112
Center CO 81125
719-754-2744

Ticket No. 34520

Moltz Constructors Inc.
P.O. Box 1030
Cody WY 82414

Continental Dam Project
Creede West Hwy 149 past Clear
Creek past mi mark 48 Left
Rd 513 5 mi to job site

Today 31.00 yd

01:08:59p	7.00 yd	353.00 yd	31KS	
08/12/15	4	Ken Smith	3.00 in	5.00

1.00	4500PSI LH 7 Sack Class DP Concrete		353.00	117.75	824.25
7.00	DELIVERY	Delivery Charge	353.00	72.00	504.00

SubTotal $	1328.25
Tax 2.900	23.90
Total $	1352.15

01:15:34p

Order Total $67562.28

Ticket No. 34520

Batch size 7.00 yd

-Material-	-Indication-	- AVDP EQU -	- Targets --	-% Tol-	WatFree	%Moist
3\4 AGG	11220 lb	11220 lb	11260 lb	-0.4	-280.5	0.00
SAND	4840 lb	4840 lb	4560 lb	6.1*	378.2	11.02
SAND3	4480 lb	4480 lb	4520 lb	-0.9	319.3	10.10
I-II	3725 lb	3725 lb	3695 lb	0.8		
FLYASH	940 lb	940 lb	925 lb	1.6*		
H2O	180 G	180 G	180 G	0.0	1502.1	
MB AE90	43 fl.oz	43 fl.oz	42 fl.oz	2.4		
3	208 fl.oz	208 fl.oz	208 fl.oz	0.0		
DE.VO	327 fl.oz	327 fl.oz	323 fl.oz	1.2		

DryAggs: 19649 lb
Cems: 4665 lb
Waters: 1919 lb
Total: 26707 lb
Wat/Cem: 0.411
Add: -4 G

01:15:34p 08/12/15
Bottles Empty

	Start	End	
AGG	40	40	lb
CEM	0	0	lb

Received By

Center Redi Mix Inc.
P.O. Box 608
1504 W. Hwy 112
Center CO 81125
719-754-2744

Ticket No. 34519

Moltz Constructors Inc.
P.O. Box 1030
Cody WY - 82414

Continental Dam Project
Creede West Hwy 149 past Clear Creek past mi mark 48 Left Rd 513 5 mi to job site

Today 24.00 yd

12:33:47p 8.00 yd 353.00 yd 30DC

08/12/15 3 Ken Smith 3.00 in 5.00

00	4500PSI LH	7 Sack Class DP Concrete	353.00	117.75	942.00
.00	DELIVERY	Delivery Charge	353.00	72.00	576.00

SubTotal $ 1518.00
Tax 2.900 27.32
Total $ 1545.32

12:42:03p

Order Total $66210.13

Ticket No. 34519

Batch size 8.00 yd

-Material-	-Indication-	- AVDP EQU -	- Targets -	-% Tol-	WatFree	%Moist
3\4 AGG	12840 lb	12840 lb	12880 lb	-0.3	-321.0	0.00
SAND	5420 lb	5420 lb	5220 lb	3.8*	439.0	11.37
SAND3	5140 lb	5140 lb	5180 lb	-0.8	362.6	10.01
I-II	4250 lb	4250 lb	4225 lb	0.6		
FLYASH	1090 lb	1090 lb	1055 lb	3.3*		
H20	205 G	205 G	205 G	0.0	1710.7	
MB AE90	48 fl.oz	48 fl.oz	48 fl.oz	0.0		
3	238 fl.oz	238 fl.oz	238 fl.oz	0.0		
DELVO	372 fl.oz	372 fl.oz	370 fl.oz	0.5		

DryAggs: 22379 lb
Cems: 5340 lb
Waters: 2191 lb
Total: 30451 lb
Wat/Cem: 0.410
Add: -4 G

12:42:03p 08/12/15
Bottles Empty

	Start	End	
AGG	20	40	lb
CEM	0	0	lb

Received By

Center Redi Mix Inc.
P.O. Box 608
1504 W. Hwy 112
Center CO 81125
719-754-2744

Ticket No. 34518

Moltz Constructors Inc.
P.O. Box 1030
Cody WY 82414

Continental Dam Project
Creede West Hwy 149 past Clear Creek past mi mark 48 Left Rd 513 5 mi to job site

Today 16.00 yd

12:00:08p 8.00 yd 353.00 yd 3765

08/12/15 2 Ken Smith 3.00 in 5.00

00	4500PSI LH	7 Sack Class DP Concrete	353.00	117.75	942.00
.00	DELIVERY	Delivery Charge	353.00	72.00	576.00

AIR 2.8 6
SLump 2.5"

SubTotal $	1518.00
Tax 2.900	27.32
Total $	1545.32

12:07:50p AIR 12 oz
Rebuild 1.5 gt
Water 10 gal

Order Total $64664.81

icket No. 34518

Batch size 8.00 yd

-Material-	-Indication-	- AVDP EQU -	- Targets -	-% Tol-	Wat	Free	%Moist
3\4 AGG	12880 lb	12880 lb	12900 lb	-0.2		-302.7	0.00
SAND	5440 lb	5440 lb	5260 lb	3.4*		461.7	11.73
SAND3	5140 lb	5140 lb	5180 lb	-0.8		371.0	10.20
I-II	4265 lb	4265 lb	4225 lb	0.9			
FLYASH	1075 lb	1075 lb	1055 lb	1.9*			
H20	200 G	200 G	200 G	0.0	1669.0		
MB AE90	48 fl.oz	48 fl.oz	48 fl.oz	0.0			
3	238 fl.oz	238 fl.oz	238 fl.oz	0.0			
DE D	372 fl.oz	372 fl.oz	370 fl.oz	0.5			

DryAggs:	22413 lb
Cems:	5340 lb
Waters:	2199 lb
Total:	30469 lb
Wat/Cem:	0.412
Add:	-5 G

12:07:50p 08/12/15
Bottles Empty

	Start	End
AGG	20	40 lb
CEM	0	0 lb

eceived By

Center Redi Mix Inc.
P.O. Box 608
1504 W. Hwy 112
Center CO 81125
719-754-2744

Ticket No. 34517

Moltz Constructors Inc.
P.O. Box 1030
Cody WY 82414

Continental Dam Project
Creede West Hwy 149 past Clear Creek past mi mark 48 Left - Rd 513 5 mi to job site

Today 8.00 yd

11:13:11a 8.00 yd 353.00 yd 32JN

08/12/15 1 Ken Smith 3.00 in 5.00

.00	4500PSI LH	7 Sack Class DP Concrete	353.00	117.75	942.00
8.00	DELIVERY	Delivery Charge	353.00	72.00	576.00

SubTotal $	1518.00
Tax 2.900	27.32
Total $	1545.32

11:19:17a

Order Total $63119.49

Ticket No. 34517

Batch size 8.00 yd

-Material-	-Indication-	- AVDP EQU -	- Targets -	-% Tol-	WatFree	%Moist
3\4 AGG	12880 lb	12880 lb	12900 lb	-0.2	-299.8	0.00
SAND	5420 lb	5420 lb	5240 lb	3.4*	446.7	11.43
SAND3	5160 lb	5160 lb	5200 lb	-0.8	382.0	10.42
I-II	4260 lb	4260 lb	4225 lb	0.8		
FLYASH	1085 lb	1085 lb	1055 lb	2.8*		
H20	199 G	199 G	199 G	0.0	1660.7	
MB-QE90	49 fl.oz	49 fl.oz	48 fl.oz	2.1		
[illegible]	238 fl.oz	238 fl.oz	238 fl.oz	0.0		
DELVO	373 fl.oz	373 fl.oz	370 fl.oz	0.8		

DryAggs:	22417 lb
Cems:	5345 lb
Waters:	2200 lb
Total:	30466 lb
Wat/Cem:	0.412
Add:	-4 G

11:19:17a 08/12/15
Bottles Empty

	Start	End
AGG	20	20 lb
CEM	0	0 lb

Received By [signature] Bot LRT

Center Redi Mix Inc.
P.O. Box 600
1504 W. Hwy 112
Center CO 81125
719-754-2744

Ticket No. 34512

Moltz Constructors Inc.
P.O. Box 1030
Cody WY 82414

Continental Dam Project
Creede West Hwy 149 past Clear
Creek past mi-mark 48 Left
Rd 513 5 mi to job site

Today 27.00 yd

11:44:29a 6.00 yd 322.00 yd 31KS

08/11/15 4 Ken Smith 3.00 in 5.00

00	4500PSI LH	7 Sack Class DP Concrete	322.00	117.75	706.50
.00	DELIVERY	Delivery Charge	322.00	72.00	432.00

SubTotal $	1138.50
Tax 2.900	20.49
Total $	1158.99

11:50:02a

Order Total $61574.17

icket No. 34512

Batch size 6.00 yd

-Material-	-Indication-	- AVDP EQU -	- Targets -	-% Tol-	WatFree	%Moist
3\4 AGG	9620 lb	9620 lb	9660 lb	-0.4	-240.5	0.00
SAND	4080 lb	4080 lb	3920 lb	4.1*	341.2	11.58
SAND3	3860 lb	3860 lb	3900 lb	-1.0	300.7	10.89
I-II	3185 lb	3185 lb	3170 lb	0.5		
FLYASH	800 lb	800 lb	790 lb	1.3		
H20	150 G	150 G	150 G	0.0	1251.8	
MB AE90	37 fl.oz	37 fl.oz	36 fl.oz	2.8		
3	178 fl.oz	178 fl.oz	178 fl.oz	0.0		
D 0	279 fl.oz	279 fl.oz	277 fl.oz	0.7		

DryAggs:	16757 lb
Cems:	3985 lb
Waters:	1653 lb
Total:	22797 lb
Wat/Cem:	0.415
Add:	-5 G

11:50:02a 08/11/15
Bottles Empty

	Start	End
AGG	0	20 lb
CEM	0	0 lb

eceived By_____

Center Redi Mix Inc.
P.O. Box 608
1504 W. Hwy 112
Center CO 81125
719-754-2744

Ticket No. 34511

Moltz Constructors Inc.
P.O. Box 1030
Cody WY 82414

Continental Dam Project
Creede West Hwy 149 past Clear
Creek past mi mark 48 Left
Rd 513 5 mi to job site

Today 21.00 yd

11:12:30a 7.00 yd 322.00 yd 30DC

08/11/15 3 Ken Smith 3.00 in 5.00

.00	4500PSI LH	7 Sack Class DP Concrete	322.00	117.75	824.25
.00	DELIVERY	Delivery Charge	322.00	72.00	504.00

SubTotal $	1328.25
Tax 2.900	23.90
Total $	1352.15

11:17:52a

Order Total $60415.18

Ticket No. 34511

Batch size 7.00 yd

-Material-	-Indication-	- AVDP EQU -	- Targets --	-% Tol-	WatFree	%Moist
3\4 AGG	11320 lb	11320 lb	11260 lb	0.5	-283.0	0.00
SAND	4720 lb	4720 lb	4560 lb	3.5*	383.2	11.28
SAND3	4480 lb	4480 lb	4520 lb	-0.9	333.9	10.49
I-II	3755 lb	3755 lb	3695 lb	1.6*		
FLYASH	945 lb	945 lb	925 lb	2.2*		
H20	179 G	179 G	179 G	0.0	1493.8	
MB AE90	43 fl.oz	43 fl.oz	42 fl.oz	2.4		
3	208 fl.oz	208 fl.oz	208 fl.oz	0.0		
D	326 fl.oz	326 fl.oz	323 fl.oz	0.9		

DryAggs:	19616 lb
Cems:	4700 lb
Waters:	1928 lb
Total:	26714 lb
Wat/Cem:	0.410
Add:	4 G

11:17:52a 08/11/15
Bottles Empty

	Start	End
AGG	0	20 lb
CEM	0	0 lb

Received By

Center Redi Mix Inc.
P.O. Box 608
1504 W. Hwy 112
Center CO 81125
719-754-2744

Ticket No. 34510

Moltz Constructors Inc.
P.O. Box 1030
Cody WY 82414

Continental Dam Project
Creede West Hwy 149 past Clear
Creek past mi mark 48 Left
Rd 513 5 mi to job site

Today 14.00 yd

10:40:09a 7.00 yd 322.00 yd 33JV

08/11/15 2 Ken Smith 3.00 in 5.00

00	4500PSI LH	7 Sack Class DP Concrete	322.00	117.75	824.25
7.00	DELIVERY	Delivery Charge	322.00	72.00	504.00

SubTotal $	1328.25
Tax 2.900	23.90
Total $	1352.15

10:45:40a

Order Total $59063.03

Ticket No. 34510

Batch size 7.00 yd

-Material-	-Indication-	- AVDP EQU -	- Targets --	-% Tol-	WatFree	%Moist
3\4 AGG	11300 lb	11300 lb	11300 lb	0.0	-254.2	0.00
SAND	4780 lb	4780 lb	4560 lb	4.8*	393.9	11.43
SAND3	4480 lb	4480 lb	4520 lb	-0.9	329.8	10.38
I-II	3730 lb	3730 lb	3695 lb	0.9		
FLYASH	975 lb	975 lb	925 lb	5.4*		
H20	175 G	175 G	175 G	0.0	1460.4	
MB AE90	43 fl.oz	43 fl.oz	42 fl.oz	2.4		
3	208 fl.oz	208 fl.oz	208 fl.oz	0.0		
DELVD	326 fl.oz	326 fl.oz	323 fl.oz	0.9		

DryAggs:	19648 lb
Cems:	4705 lb
Waters:	1930 lb
Total:	26725 lb
Wat/Cem:	0.410
Add:	4 G

10:45:40a 08/11/15
Bottles Empty

	Start	End
AGG	0	0 lb
CEM	0	0 lb

Received By

Center Redi Mix Inc.
P.O. Box 608
1504 W. Hwy 112
Center CO 81125
719-754-2744

Ticket No. 34509

Moltz Constructors Inc.
P.O. Box 1030
Cody WY 82414

Continental Dam Project
Creede West Hwy 149 past Clear Creek past mi mark 48 Left Rd 513 5 mi to job site

Today 7.00 yd

09:47:47a 7.00 yd 322.00 yd 3768

08/11/15 1 Ken Smith 3.00 in 5.00

00	4500PSI LH	7 Sack Class DP Concrete	322.00	117.75	824.25
00	DELIVERY	Delivery Charge	322.00	72.00	504.00

AIR 5.8
SLump 3.25

SubTotal $	1328.25
Tax 2.900	23.90
Total $	1352.15

09:53:16a

Order Total $57710.88

Ticket No. 34509

Batch size 7.00 yd

-Material-	-Indication-	- AVDP EQU -	- Targets -	-% Tol-	WatFree	%Moist
3\4 AGG	11260 lb	11260 lb	11300 lb	-0.4	-253.3	0.00
SAND	4800 lb	4800 lb	4560 lb	5.3*	389.2	11.27
SAND3	4460 lb	4460 lb	4500 lb	-0.9	311.4	9.93
I-II	3730 lb	3730 lb	3695 lb	0.9		
FLYASH	930 lb	930 lb	925 lb	0.5		
H20	178 G	178 G	178 G	0.0	1485.4	
MB AE90	43 fl.oz	43 fl.oz	42 fl.oz	2.4		
3	208 fl.oz	208 fl.oz	208 fl.oz	0.0		
D 0	325 fl.oz	325 fl.oz	323 fl.oz	0.6		

DryAggs: 19631 lb
Cems: 4660 lb
Waters: 1933 lb
Total: 26665 lb
Wat/Cem: 0.415
Add: 1 G

09:53:16a 08/11/15
Bottles Empty

	Start	End
AGG	0	0 lb
CEM	0	0 lb

eceived By

Center Redi Mix Inc.
P.O. Box 600
1504 W. Hwy 112
Center CO 81125
719-754-2744

Ticket No. 34508

Moltz Constructors Inc.
P.O. Box 1030
Cody WY 82414

Continental Dam Project
Creede West Hwy 149 past Clear
Creek past mi mark 48 Left
Rd 513 5 mi to job site

Today 33.00 yd

01:19:15p 8.25 yd 295.00 yd 31KS

08/10/15 4 Ken Smith 3.00 in 5.00

25	4500PSI LH	7 Sack Class DP Concrete	295.00	117.75	971.44
8.25	DELIVERY	Delivery Charge	295.00	72.00	594.00

SubTotal $ 1565.44
Tax 2.900 28.17
Total $ 1593.61

01:26:31p

Order Total $56358.73

Ticket No. 34508

Batch size 8.25 yd

-Material-	-Indication-	- AVDP EQU -	- Targets -	-% Tol-	WatFree	%Moist
3\4 AGG	13280 lb	13280 lb	13320 lb	-0.3	-298.8	0.00
SAND	5400 lb	5400 lb	5400 lb	0.0	441.1	11.07
SAND3	5320 lb	5320 lb	5340 lb	-0.4	375.5	9.75
I-FI	4410 lb	4410 lb	4355 lb	1.3*		
FLYASH	1100 lb	1100 lb	1090 lb	0.9		
H20	210 G	210 G	210 G	0.0	1752.4	
MB AE90	50 fl.oz	50 fl.oz	50 fl.oz	0.0		
[illegible]	246 fl.oz	246 fl.oz	246 fl.oz	0.0		
DE.90	386 fl.oz	386 fl.oz	381 fl.oz	1.3		

DryAggs: 22989 lb
Cems: 5510 lb
Waters: 2270 lb
Total: 31262 lb
Wat/Cem: 0.412
Add: 3 G

01:26:31p 08/10/15
Bottles Empty

	Start	End	
AGG	0	0	lb
CEM	0	0	lb

[illegible]eived By

Center Redi Mix Inc.
P.O. Box 608
1504 W. Hwy 112
Center CO 81125
719-754-2744

Ticket No. 34507

Moltz Constructors Inc.
P.O. Box 1030
Cody WY 82414

Continental Dam Project
Creede West Hwy 149 past Clear
Creek past mi mark 48 Left
Rd 513 5 mi to job site

Today 24.75 yd

12:53:52p 8.25 yd 295.00 yd 30DC

08/10/15 3 Ken Smith 2.75 in 5.00

8.25	4500PSI LH	7 Sack Class DP Concrete	295.00	117.75	971.44
8.25	DELIVERY	Delivery Charge	295.00	72.00	594.00

SubTotal $ 1565.44
Tax 2.900 28.17
Total $ 1593.61

01:00:27p

Order Total $54765.12

Ticket No. 34507

Batch size 8.25 yd

-Material-	-Indication-	- AVDP EQU -	- Targets -	-% Tol-	WatFree	%Moist
3\4 AGG	13280 lb	13280 lb	13320 lb	-0.3	-298.8	0.00
SAND	5440 lb	5440 lb	5420 lb	0.4	457.9	11.37
SAND3	5300 lb	5300 lb	5340 lb	-0.7	386.5	10.02
I-II	4360 lb	4360 lb	4355 lb	0.1		
FLYASH	1115 lb	1115 lb	1090 lb	2.3*		
H20	204 G	204 G	204 G	0.0	1702.4	
MB AE90	51 fl.oz	51 fl.oz	50 fl.oz	2.0		
[illegible]	246 fl.oz	246 fl.oz	246 fl.oz	0.0		
[illegible]	383 fl.oz	383 fl.oz	381 fl.oz	0.5		

DryAggs: 22982 lb
Cems: 5475 lb
Waters: 2248 lb
Total: 31197 lb
Wat/Cem: 0.411
Add: 4 G

01:00:27p 08/10/15
Bottles Empty

	Start	End
AGG	0	0 lb
CEM	0	0 lb

Received By [signature]

Center Redi Mix Inc.
P.O. Box 608
1504 W. Hwy 112
Center CO 81125
719-754-2744

Ticket No. 34506

Moltz Constructors Inc.
P.O. Box 1030
Cody WY 82414

Continental Dam Project
Creede West Hwy 149 past Clear
Creek past mi mark 48 Left
Rd 513 5 mi to job site

Today 16.50 yd

12:20:06p 8.25 yd 295.00 yd 33JV

08/10/15 2 Ken Smith 2.75 in 5.00

25	4500PSI LH	7 Sack Class DP Concrete	295.00	117.75	871.44
.25	DELIVERY	Delivery Charge	295.00	72.00	594.00

SubTotal $ 1565.44
Tax 2.900 28.17
Total $ 1593.61

12:28:00p

Order Total $53171.51

icket No. 34506

Batch size 8.25 yd

-Material-	-Indication-	- AVDP EQU -	- Targets -	-% Tol-	WatFree	%Moist
3\4 AGG	13300 lb	13300 lb	13320 lb	-0.2	-299.2	0.00
SAND	5480 lb	5480 lb	5440 lb	0.7	486.8	11.94
SAND3	5320 lb	5320 lb	5360 lb	-0.7	392.3	10.12
I-II	4425 lb	4425 lb	4355 lb	1.6*		
FLYASH	1100 lb	1100 lb	1090 lb	0.9		
H20	200 G	200 G	200 G	0.0	1669.0	
MB AE90	50 fl.oz	50 fl.oz	50 fl.oz	0.0		
3	246 fl.oz	246 fl.oz	246 fl.oz	0.0		
D	384 fl.oz	384 fl.oz	381 fl.oz	0.8		

DryAggs: 23026 lb
Cems: 5525 lb
Waters: 2249 lb
Total: 31294 lb
Wat/Cem: 0.407
Add: 7 G

12:28:00p 08/10/15
Bottles Empty

	Start	End
AGG	0	20 lb
CEM	0	0 lb

eceived By_____

Center Redi Mix Inc.
P.O. Box 608
1504 W. Hwy 112
Center CO 81125
719-754-2744

Ticket No. 34505

Moltz Constructors Inc.
P.O. Box 1030
Cody WY 82414

Continental Dam Project
Creede West Hwy 149 past Clear
Creek past mi mark 48 Left
Rd 513 5 mi to job site

Today 8.25 yd

11:53:48a 8.25 yd 295.00 yd 3765

08/10/15 1 Ken Smith 3.00 in 5.00

25	4500PSI LH	7 Sack Class DP Concrete	295.00	117.75	971.44
25	DELIVERY	Delivery Charge	295.00	72.00	594.00

SubTotal $ 1565.44
Tax 2.900 28.17
Total $ 1593.61

12:00:33p

Order Total $51577.90

Ticket No. 34505

Batch size 8.25 yd

-Material-	-Indication-	- AVDP EQU -	- Targets -	-% Tol-	WatFree	%Moist
3\4 AGG	13280 lb	13280 lb	13320 lb	-0.3	-298.8	0.00
SAND	5440 lb	5440 lb	5420 lb	0.4	464.9	11.53
SAND3	5300 lb	5300 lb	5340 lb	-0.7	382.7	9.94
I-II	4390 lb	4390 lb	4355 lb	0.8		
FLYASH	1100 lb	1100 lb	1090 lb	0.9		
H20	206 G	206 G	206 G	0.0	1719.1	
MB_AE90	51 fl.oz	51 fl.oz	50 fl.oz	2.0		
3	246 fl.oz	246 fl.oz	246 fl.oz	0.0		
D	383 fl.oz	383 fl.oz	381 fl.oz	0.5		

DryAggs: 22978 lb
Cems: 5490 lb
Waters: 2268 lb
Total: 31229 lb
Wat/Cem: 0.413
Add: 3 G

12:00:33p 08/10/15
Bottles Empty

	Start	End
AGG	0	20 lb
CEM	0	0 lb

eceived By

Center Redi Mix Inc.
P.O. Box 600
1504 W. Hwy 112
Center CO 81125
719-754-2744

Ticket No. 34499

Moltz Constructors Inc.
P.O. Box 1030
Cody WY 82414

Continental Dam Project
Creede West Hwy 149 past Clear
Creek past mi mark 48 Left
Rd 513 5 mi to job site

Today 32.00 yd

01:57:11p 8.00 yd 262.00 yd 33JV

08/07/15 4 Ken Smith 3.00 in 5.00

8.00	4500PSI LH	7 Sack Class DP Concrete	262.00	117.75	942.00
8.00	DELIVERY	Delivery Charge	262.00	72.00	576.00

SubTotal $ 1518.00
Tax 2.900 27.32
Total $ 1545.32

02:05:13p

Order Total $49984.29

icket No. 34499

Batch size 8.00 yd

-Material-	-Indication-	- AVDP EQU -	- Targets -	-% Tol-	WatFree	%Moist
3\4 AGG	12880 lb	12880 lb	12900 lb	-0.2	-289.8	0.00
SAND	5500 lb	5500 lb	5240 lb	5.0*	447.6	11.31
SAND3	5140 lb	5140 lb	5180 lb	-0.8	373.1	10.25
I-II	4265 lb	4265 lb	4225 lb	0.9		
FLYASH	1090 lb	1090 lb	1055 lb	3.3*		
H20	200 G	200 G	200 G	0.0	1669.0	
MB AE90	49 fl.oz	49 fl.oz	48 fl.oz	2.1		
322N	238 fl.oz	238 fl.oz	238 fl.oz	0.0		
DELWO	374 fl.oz	374 fl.oz	370 fl.oz	1.1		

DryAggs: 22483 lb
Cems: 5355 lb
Waters: 2200 lb
Total: 30544 lb
Wat/Cem: 0.411
Add: 4 G

02:05:13p 08/07/15
Bottles Empty

	Start	End
AGG	0	20 lb
CEM	0	0 lb

eceived By_____

Center Redi Mix Inc.
P.O. Box 608
1504 W. Hwy 112
Center CO 81125
719-754-2744

Ticket No. 34498

Moltz Constructors Inc.
P.O. Box 1030
Cody WY 82414

Continental Dam Project
Creede West Hwy 149 past Clear Creek past mi mark 48 Left Rd 513 5 mi to job site

Today 24.00 yd

01:33:47p 8.00 yd 262.00 yd 30DC

08/07/15 3 Ken Smith 3.00 in 5.00

8.00	4500PSI LH	7 Sack Class DP Concrete	262.00	117.75	942.00
8.00	DELIVERY	Delivery Charge	262.00	72.00	576.00

SubTotal $	1518.00
Tax 2.900	27.32
Total $	1545.32

01:40:28p

Order Total $48438.97

Ticket No. 34498

Batch size 8.00 yd

-Material-	-Indication-	- AVDP EQU -	- Targets -	-% Tol-	WatFree	%Moist
3\4 AGG	12880 lb	12880 lb	12900 lb	-0.2	-289.8	0.00
SAND	5460 lb	5460 lb	5200 lb	5.0*	422.0	10.82
SAND3	5140 lb	5140 lb	5180 lb	-0.8	366.8	10.11
I-II	4265 lb	4265 lb	4225 lb	0.9		
FLYASH	1080 lb	1080 lb	1055 lb	2.4*		
H20	204 G	204 G	204 G	0.0	1702.4	
MB AE90	49 fl.oz	49 fl.oz	48 fl.oz	2.1		
322N	240 fl.oz	240 fl.oz	238 fl.oz	0.8		
DE[illegible]O	373 fl.oz	373 fl.oz	370 fl.oz	0.8		

DryAggs: 22475 lb
Cems: 5345 lb
Waters: 2201 lb
Total: 30527 lb
Wat/Cem: 0.412
Add: 3 G

01:40:28p 08/07/15
Bottles Empty

	Start	End
AGG	0	0 lb
CEM	0	0 lb

Received By

Center Redi Mix Inc.
P.O. Box 608
1504 W. Hwy 112
Center CO 81125
719-754-2744

Ticket No. 34497

Moltz Constructors Inc.
P.O. Box 1030
Cody WY 82414

Continental Dam Project
Creede West Hwy 149 past Clear
Creek past mi mark 48 Left
Rd 513 5 mi to job site

Today 16.00 yd

01:04:37p 8.00 yd 262.00 yd 37GS

08/07/15 2 Ken Smith 3.00 in 5.00

8.00	4500PSI LH	7 Sack Class DP Concrete	262.00	117.75	942.00
8.00	DELIVERY	Delivery Charge	262.00	72.00	576.00

SubTotal $	1518.00
Tax 2.900	27.32
Total $	1545.32

01:11:18p

Order Total $46893.65

icket No. 34497

Batch size 8.00 yd

-Material-	-Indication-	- AVDP EQU -	- Targets --	-% Tol-	WatFree	%Moist
3\4 AGG	12840 lb	12840 lb	12880 lb	-0.3	-321.0	0.00
SAND	5440 lb	5440 lb	5200 lb	4.6*	417.1	11.01
SAND3	5120 lb	5120 lb	5160 lb	-0.8	353.8	10.11
I-II	4265 lb	4265 lb	4225 lb	0.9		
FLYASH	1080 lb	1080 lb	1055 lb	2.4*		
H20	210 G	210 G	210 G	0.0	1752.4	
MB AE90	49 fl.oz	49 fl.oz	48 fl.oz	2.1		
32RN	238 fl.oz	238 fl.oz	238 fl.oz	0.0		
D[illegible]	374 fl.oz	374 fl.oz	370 fl.oz	1.1		

DryAggs:	22390 lb
Cems:	5345 lb
Waters:	2202 lb
Total:	30497 lb
Wat/Cem:	0.412
Add:	3 G

01:11:18p 08/07/15
Bottles Empty

	Start	End
AGG	0	20 lb
CEM	0	0 lb

eceived By

Center Redi Mix Inc.
P.O. Box 608
1504 W. Hwy 112
Center CO 81125
719-754-2744

Ticket No. 34496

Moltz Constructors Inc.
P.O. Box 1030
Cody WY 82414

Continental Dam Project
Creede West Hwy 149 past Clear
Creek past mi mark 48 Left
Rd 513 5 mi to job site

Today 8.00 yd

12:36:09p 8.00 yd 262.00 yd 32JN

08/07/15 1 Ken Smith 3.00 in 5.00

8.00	4500PSI LH	7 Sack Class DP Concrete	262.00	117.75	942.00
8.00	DELIVERY	Delivery Charge	262.00	72.00	576.00

SubTotal $ 1518.00
Tax 2.900 27.32
Total $ 1545.32

12:42:39p

Order Total $45348.33

Ticket No. 34496

Batch size 8.00 yd

-Material-	-Indication-	- AVDP EQU -	- Targets --	-% Tol-	WatFree	%Moist
3\4 AGG	12840 lb	12840 lb	12880 lb	-0.3	-321.0	0.00
SAND	5400 lb	5400 lb	5180 lb	4.2*	402.4	10.75
SAND3	5100 lb	5100 lb	5140 lb	-0.8	341.9	9.87
I-II	4240 lb	4240 lb	4225 lb	0.4		
FLYASH	1075 lb	1075 lb	1055 lb	1.9*		
H20	213 G	213 G	213 G	0.0	1777.5	
MB AE90	49 fl.oz	49 fl.oz	48 fl.oz	2.1		
322N	238 fl.oz	238 fl.oz	238 fl.oz	0.0		
D[illegible]0	372 fl.oz	372 fl.oz	370 fl.oz	0.5		

DryAggs: 22358 lb
Cems: 5315 lb
Waters: 2201 lb
Total: 30432 lb
Wat/Cem: 0.414
Add: 2 G

12:42:39p 08/07/15
Bottles Empty

	Start	End
AGG	0	0 lb
CEM	0	0 lb

eceived By_____

Center Redi Mix Inc.
P.O. Box 608
1504 W. Hwy 112
Center CO 81125
719-754-2744

Ticket No. 34486

Moltz Constructors Inc.
P.O. Box 1030
Cody WY 82414

Continental Dam Project
Creede West Hwy 149 past Clear
Creek past mi mark 48 Left
Rd 513 5 mi to job site

Today 16.00 yd

12:12:26p 8.00 yd 230.00 yd 30DC

08/06/15 2 Ken Smith 3.00 in 5.00

8.00	4500PSI LH	7 Sack Class DP Concrete	230.00	117.75	942.00
.00	DELIVERY	Delivery Charge	230.00	72.00	576.00

SubTotal $ 1518.00
Tax 2.900 27.32
Total $ 1545.32

12:18:20p

Order Total $43803.01

icket No. 34486

Batch size 8.00 yd

-Material-	-Indication-	- AVDP EQU -	- Targets	-% Tol-	WatFree	%Moist
3\4 AGG	12840 lb	12840 lb	12880 lb	-0.3	-321.0	0.00
SAND	5460 lb	5460 lb	5200 lb	5.0*	417.0	10.98
SAND3	5160 lb	5160 lb	5200 lb	-0.8	408.9	11.32
I-II	4235 lb	4235 lb	4225 lb	0.2		
FLYASH	1085 lb	1085 lb	1055 lb	2.8*		
H20	203 G	203 G	203 G	0.0	1694.0	
MB AE90	49 fl.oz	49 fl.oz	48 fl.oz	2.1		
[illegible]	238 fl.oz	238 fl.oz	238 fl.oz	0.0		
D[illegible]D	372 fl.oz	372 fl.oz	370 fl.oz	0.5		

DryAggs: 22395 lb
Cems: 5320 lb
Waters: 2199 lb
Total: 30474 lb
Wat/Cem: 0.413
Add: 2 G

12:18:20p 08/06/15
Bottles Empty

	Start	End
AGG	0	20 lb
CEM	0	0 lb

eceived By_____

Center Redi Mix Inc.
P.O. Box 508
1504 W. Hwy 112
Center CO 81125
719-754-2744

Ticket No. 34485

Moltz Constructors Inc.
P.O. Box 1030
Cody WY 82414

Continental Dam Project
Creede West Hwy 149 past Clear
Creek past mark 48 Left
Rd 513 5 mi to job site

Today 8.00 yd

11:49:04a 8.00 yd 230.00 yd 31JN

08/06/15 1 Ken Smith 3.00 in 5.00

9.00	4500PSI LH	7 Sack Class DP Concrete	230.00	117.75	942.00
7.00	DELIVERY	Delivery Charge	230.00	72.00	576.00

SubTotal $ 1518.00
Tax 2.900 27.32
Total $ 1545.32

11:55:38a

Order Total $42257.69

icket No. 34485

Batch size 8.00 yd

-Material-	-Indication-	- AVDP EQU -	- Targets -	-% Tol-	Wat	Free	%Moist
3\4 AGG	12860 lb	12860 lb	12080 lb	-0.2		-321.5	0.00
SAND	5520 lb	5520 lb	5240 lb	5.3*		478.0	11.67
SAND3	5180 lb	5180 lb	5220 lb	-0.8		423.2	11.07
I-II	4265 lb	4265 lb	4225 lb	0.9			
FLYASH	1075 lb	1075 lb	1055 lb	1.9*			
H20	194 G	194 G	194 G	0.0	1618.9		
MB AE90	49 fl.oz	49 fl.oz	48 fl.oz	2.1			
32?N	240 fl.oz	240 fl.oz	238 fl.oz	0.8			
D 0	372 fl.oz	372 fl.oz	370 fl.oz	0.5			

DryAggs: 22467 lb
Cems: 5340 lb
Waters: 2199 lb
Total: 30519 lb
Wat/Cem: 0.412
Add: 3 G

11:55:38a 08/06/15
Bottles Empty

	Start	End
AGG	0	0 lb
CEM	0	0 lb

eceived By

Center Redi Mix Inc.
P.O. Box 608
1504 W. Hwy 112
Center CO 81125
719-754-2744

Ticket No. 34483

Moltz Constructors Inc.
P.O. Box 1030
Cody WY 82414

Continental Dam Project
Creede West Hwy 149 past Clear
Creek past mi mark 48 Left
Rd 513 5 mi to job site

Today 31.00 yd

12:18:05p 7.00 yd 214.00 yd 31KS

08/05/15 4 Ken Smith 3.00 in 5.00

7.00	4500PSI LH 7 Sack Class DP Concrete	214.00	117.75	824.25

SubTotal $	824.25
Tax 2.900	23.90
Total $	848.15

12:25:38p

Order Total $38480.37

icket No. 34483

Batch size 7.00 yd

-Material-	-Indication-	- AVDP EQU -	- Targets --	-% Tol-	WatFree	%Moist
3\4 AGG	11260 lb	11260 lb	11260 lb	0.0	-281.5	0.00
SAND	4760 lb	4760 lb	4620 lb	3.0*	424.8	11.99
SAND3	4520 lb	4520 lb	4560 lb	-0.9	345.7	10.45
I-II	3730 lb	3730 lb	3695 lb	0.9		
FLYASH	960 lb	960 lb	925 lb	3.8*		
H20	172 G	172 G	172 G	0.0	1435.3	
MB AE90	41 fl.oz	41 fl.oz	40 fl.oz	2.5		
32[illegible]N	208 fl.oz	208 fl.oz	208 fl.oz	0.0		
D[illegible]D	325 fl.oz	325 fl.oz	323 fl.oz	0.6		

DryAggs:	19603 lb
Cems:	4690 lb
Waters:	1924 lb
Total:	26665 lb
Wat/Cem:	0.410
Add:	4 G

12:25:38p 08/05/15
Bottles Empty

	Start	End
AGG	0	0 lb
CEM	0	0 lb

eceived By_____

Center Redi Mix Inc.
P.O. Box 608
1504 W. Hwy 112
Center CO 81125
719-754-2744

Ticket No. 34483

Moltz Constructors Inc.
P.O. Box 1030
Cody WY 82414

Continental Dam Project
Creede West Hwy 149 past Clear
Creek past mi mark 48 Left
Rd 513 5 mi to job site

Today 31.00 yd

12:18:05p 7.00 yd 214.00 yd 31KS

08/05/15 4 Ken Smith 3.00 in 5.00

7.00	4500PSI LH 7 Sack Class DP Concrete	214.00	117.75	824.25

SubTotal $ 824.25
Tax 2.900 23.90
Total $ 848.15

12:25:38p

Order Total $38480.37

Ticket No. 34483

Batch size 7.00 yd

-Material-	-Indication-	- AVDP EQU -	-- Targets --	-% Tol-	WatFree	%Moist
3\4 AGG	11260 lb	11260 lb	11260 lb	0.0	-281.5	0.00
SAND	4760 lb	4760 lb	4620 lb	3.0*	424.8	11.99
SAND3	4520 lb	4520 lb	4560 lb	-0.9	345.7	10.45
I-II	3730 lb	3730 lb	3695 lb	0.9		
FLYASH	960 lb	960 lb	925 lb	3.8*		
H20	172 G	172 G	172 G	0.0	1435.3	
MB AE90	41 fl.oz	41 fl.oz	40 fl.oz	2.5		
32[illegible]	208 fl.oz	208 fl.oz	208 fl.oz	0.0		
D[illegible]O	325 fl.oz	325 fl.oz	323 fl.oz	0.6		

DryAggs: 19603 lb
Cems: 4690 lb
Waters: 1924 lb
Total: 26665 lb
Wat/Cem: 0.410
Add: 4 G

12:25:38p 08/05/15
Bottles Empty

	Start	End
AGG	0	0 lb
CEM	0	0 lb

Received By_____

Center Redi Mix Inc.
P.O. Box 608
1504 W. Hwy 112
Center CO 81125
719-754-2744

Ticket No. 34482

Moltz Constructors Inc.
P.O. Box 1030
Cody WY 82414

Continental Dam Project
Creede West Hwy 149 past Clear
Creek past mi mark 48 Left
Rd 513 5 mi to job site

Today 24.00 yd

11:50:52a 8.00 yd 214.00 yd 33JV

08/05/15 3 Ken Smith 3.00 in 5.00

8.00	4500PSI LH 7 Sack Class DP Concrete	214.00	117.75	942.00

SubTotal $ 942.00
Tax 2.900 27.32
Total $ 969.32

11:58:13a

Order Total $37632.22

Ticket No. 34482

Batch size 8.00 yd

Material	Indication	AVDP EQU	Targets	% Tol	Wat	Free	%Moist
3\4 AGG	12860 lb	12860 lb	12880 lb	-0.2	-321.5		0.00
SAND	5540 lb	5540 lb	5260 lb	5.3*	498.9		12.10
SAND3	5140 lb	5140 lb	5180 lb	-0.8	380.1		10.14
I-II	4265 lb	4265 lb	4225 lb	0.9			
FLYASH	1075 lb	1075 lb	1055 lb	1.9*			
H20	196 G	196 G	196 G	0.0	1635.6		
MB AE90	47 fl.oz	47 fl.oz	46 fl.oz	2.2			
322N	238 fl.oz	238 fl.oz	238 fl.oz	0.0			
D[illegible]D	373 fl.oz	373 fl.oz	370 fl.oz	0.8			

DryAggs: 22469 lb
Cems: 5340 lb
Waters: 2193 lb
Total: 30516 lb
Wat/Cem: 0.411
Add: 4 G

11:58:13a 08/05/15
Bottles Empty

	Start	End
AGG	0	20 lb
CEM	0	0 lb

Received By

Center Redi Mix Inc.
P.O. Box 608
1504 W. Hwy 112
Center CO- 81125
719-754-2744

Ticket No. 34481

Moltz Constructors Inc.
P.O. Box 1030
Cody WY 82414

Continental Dam Project
Creede West Hwy 149 past Clear Creek past mi mark 48 Left Rd 513 5 mi to job site

Today 16.00 yd

11:23:38a 8.00 yd 214.00 yd 32JN

08/05/15 2 Ken Smith 3.00 in 5.00

8.00	4500PSI LH 7 Sack Class DP Concrete	214.00	117.75	942.00

SubTotal $	942.00
Tax 2.900	27.32
Total $	969.32

11:31:54a

Order Total $36662.90

Ticket No. 34481

Batch size 8.00 yd

-Material-	-Indication-	- AVDP EQU -	- Targets -	-% Tol-	WatFree	%Moist
3\4 AGG	12860 lb	12860 lb	12880 lb	-0.2	-321.5	0.00
SAND	5400 lb	5400 lb	5260 lb	2.7	483.6	12.03
SAND3	5140 lb	5140 lb	5180 lb	-0.8	381.1	10.17
I-II	4255 lb	4255 lb	4225 lb	0.7		
FLYASH	1085 lb	1085 lb	1055 lb	2.8*		
H20	199 G	199 G	199 G	0.0	1660.7	
MB AE90	47 fl.oz	47 fl.oz	46 fl.oz	2.2		
322N	238 fl.oz	238 fl.oz	238 fl.oz	0.0		
D[illegible]D	373 fl.oz	373 fl.oz	370 fl.oz	0.8		

DryAggs:	22346 lb
Cems:	5340 lb
Waters:	2204 lb
Total:	30401 lb
Wat/Cem:	0.413
Add:	3 G

11:31:54a 08/05/15
Bottles Empty

	Start	End
AGG	0	20 lb
CEM	0	0 lb

eceived By

Center Redi Mix Inc.
P.O. Box 608
1504 W. Hwy 112
Center CO 81125
719-754-2744

Ticket No. 34480

Moltz Constructors Inc.
P.O. Box 1030
Cody WY 82414

Continental Dam Project
Creede West Hwy 149 past Clear
Creek past mi mark 48 Left
Rd 513 5 mi to job site

Today 8.00 yd

10:53:34a 8.00 yd 214.00 yd 30DC

08/05/15 1 Ken Smith 3.00 in 5.00

8.00	4500PSI LH 7 Sack Class DP Concrete	214.00	117.75	942.00

SubTotal $ 942.00
Tax 2.900 27.32
Total $ 969.32

11:02:47a

Order Total $35693.58

icket No. 34480

Batch size 8.00 yd

-Material-	-Indication-	- AVDP EQU -	- Targets -	-% Tol-	WatFree	%Moist
3\4 AGG	12860 lb	12860 lb	12880 lb	-0.2	-321.5	0.00
SAND	5400 lb	5400 lb	5260 lb	2.7*	476.9	11.88
SAND3	5140 lb	5140 lb	5180 lb	-0.8	379.5	10.13
I-II	4250 lb	4250 lb	4225 lb	0.6		
FLYASH	1055 lb	1055 lb	1055 lb	0.0		
H20	200 G	200 G	200 G	0.0	1669.0	
MB AE90	47 fl.oz	47 fl.oz	46 fl.oz	2.2		
3[illegible]	238 fl.oz	238 fl.oz	238 fl.oz	0.0		
D[illegible]0	371 fl.oz	371 fl.oz	370 fl.oz	0.3		

DryAggs: 22354 lb
Cems: 5305 lb
Waters: 2204 lb
Total: 30374 lb
Wat/Cem: 0.415
Add: 1 G

11:02:47a 08/05/15
Bottles Empty

	Start	End	
AGG	0	0	lb
CEM	0	0	lb

eceived By [signature]

Center Redi Mix Inc.
P.O. Box 608
1504 W. Hwy 112
Center CO 81125
719-754-2744

Ticket No. 34480

Moltz Constructors Inc.
P.O. Box 1030
Cody WY 82414

Continental Dam Project
Creede West Hwy 149 past Clear
Creek past mi mark 48 Left
Rd 513 5 mi to job site

Today 8.00 yd

10:53:34a 8.00 yd 214.00 yd 30DC

08/05/15 1 Ken Smith 3.00 in 5.00

8.00	4500PSI LH 7 Sack Class DP Concrete	214.00	117.75	942.00

SubTotal $ 942.00
Tax 2.900 27.32
Total $ 969.32

11:02:47a

Order Total $35693.58

icket No. 34480

Batch size 8.00 yd

-Material-	-Indication-	- AVDP EQU -	- Targets --	-% Tol-	WatFree	%Moist
3\4 AGG	12860 lb	12860 lb	12880 lb	-0.2	-321.5	0.00
SAND	5400 lb	5400 lb	5260 lb	2.7*	476.9	11.88
SAND3	5140 lb	5140 lb	5180 lb	-0.8	379.5	10.13
I-II	4250 lb	4250 lb	4225 lb	0.6		
FLYASH	1055 lb	1055 lb	1055 lb	0.0		
H20	200 G	200 G	200 G	0.0	1669.0	
MB AE90	47 fl.oz	47 fl.oz	46 fl.oz	2.2		
32[illegible]	238 fl.oz	238 fl.oz	238 fl.oz	0.0		
D[illegible]	371 fl.oz	371 fl.oz	370 fl.oz	0.3		

DryAggs: 22354 lb
Cems: 5305 lb
Waters: 2204 lb
Total: 30374 lb
Wat/Cem: 0.415
Add: 1 G

11:02:47a 08/05/15
Bottles Empty

	Start	End	
AGG	0	0	lb
CEM	0	0	lb

eceived By_____

Center Redi Mix Inc.
P.O. Box 608
1504 W. Hwy 112
Center CO 81125
719-754-2744

Ticket No. 34415

Moltz Constructors Inc.
P.O. Box 1030
Cody WY 82414

Continental Dam Project
Creede West Hwy 149 past Clear
Creek past mi mark 48 Left
Rd 513 5 mi to job site

Today 24.00 yd

06:47:40a 8.00 yd 183.00 yd 32JN

07/24/15 3 Ken Smith 3.00 in 5.00

.00 4500PSI LH 7 Sack Class DP Concrete 183.00 189.75 1518.00

SubTotal $ 1518.00
Tax 0.00 0.00
Total $ 1518.00

06:53:50a

Order Total $31878.00

icket No. 34415

Batch size 8.00 yd

-Material-	-Indication-	- AVDP EQU -	- Targets --	-% Tol-	WatFree	%Moist
3\4 AGG	12840 lb	12840 lb	12880 lb	-0.3	-321.0	0.00
SAND	5420 lb	5420 lb	5240 lb	3.4*	466.0	11.59
SAND3	5100 lb	5100 lb	5140 lb	-0.8	345.4	9.41
I-II	4260 lb	4260 lb	4225 lb	0.8		
FLYASH	1055 lb	1055 lb	1055 lb	0.0		
H20	205 G	205 G	205 G	0.0	1710.7	
MB AE90	42 fl.oz	42 fl.oz	42 fl.oz	0.0		
32JN	238 fl.oz	238 fl.oz	238 fl.oz	0.0		
D[illegible]1	372 fl.oz	372 fl.oz	370 fl.oz	0.5		

DryAggs: 22358 lb
Cems: 5315 lb
Waters: 2201 lb
Total: 30386 lb
Wat/Cem: 0.414
Add: 2 G

06:53:50a 07/24/15
Bottles Empty

	Start	End	
AGG	20	40	lb
CEM	0	0	lb

eceived By_____

Center Redi Mix Inc.
P.O. Box 608
1504 W. Hwy 112
Center CO 81125
719-754-2744

Ticket No. 34415

Moltz Constructors Inc.
P.O. Box 1030
Cody WY 82414

Continental Dam Project
Creede West Hwy 149 past Clear
Creek past mi mark 48 Left
Rd 513 5 mi to job site

Today 24.00 yd

06:47:40a	8.00 yd	183.00 yd	32JN
07/24/15	3	Ken Smith	3.00 in 5.00

00	4500PSI LH 7 Sack Class DP Concrete	183.00	189.75	1518.00

SubTotal	1518.00
Tax 0.000	0.00
Total $	1518.00

06:53:58a

Order Total $31878.00

Ticket No. 34415

Batch size 8.00 yd

-Material-	-Indication-	- AVDP EQU -	- Targets --	-% Tol-	WatFree	%Moist
3\4 AGG	12840 lb	12840 lb	12880 lb	-0.3	-321.0	0.00
SAND	5420 lb	5420 lb	5240 lb	3.4*	466.0	11.59
SAND3	5100 lb	5100 lb	5140 lb	-0.8	345.4	9.41
I-II	4260 lb	4260 lb	4225 lb	0.8		
FLYASH	1055 lb	1055 lb	1055 lb	0.0		
H20	205 G	205 G	205 G	0.0	1710.7	
MB AE90	42 fl.oz	42 fl.oz	42 fl.oz	0.0		
3	238 fl.oz	238 fl.oz	238 fl.oz	0.0		
DE..VO	372 fl.oz	372 fl.oz	370 fl.oz	0.5		

DryAggs:	22358 lb
Cems:	5315 lb
Waters:	2201 lb
Total:	30386 lb
Wat/Cem:	0.414
Add:	2 G

06:53:58a 07/24/15
Bottles Empty

	Start	End
AGG	20	40 lb
CEM	0	0 lb

Received By

Center Redi Mix Inc.
P.O. Box 608
1504 W. Hwy 112
Center CO 81125
719-754-2744

Ticket No. 34414

Moltz Constructors Inc.
P.O. Box 1030
Cody WY 82414

Continental Dam Project
Creede West Hwy 149 past Clear
Creek past mi mark 48 Left
Rd 513 5 mi to job site

Today 16.00 yd

06:17:18a 8.00 yd 183.00 yd 30DC

07/24/15 2 Ken Smith 3.00 in 5.00

00 4500PSI LH 7 Sack Class DP Concrete 183.00 189.75 1518.00

SubTotal $ 1518.00
Tax 0.000 0.00
Total $ 1518.00

06:23:52a

Order Total $30360.00

icket No. 34414

Batch size 8.00 yd

-Material-	-Indication-	- AVDP EQU -	- Targets --	-% Tol-	WatFree	%Moist
3\4 AGG	12860 lb	12860 lb	12880 lb	-0.2	-321.5	0.00
SAND	5440 lb	5440 lb	5220 lb	4.2*	453.3	11.27
SAND3	5100 lb	5100 lb	5140 lb	-0.8	349.0	9.49
I-II	4270 lb	4270 lb	4225 lb	1.1*		
FLYASH	1060 lb	1060 lb	1055 lb	0.5		
H20	206 G	206 G	206 G	0.0	1719.1	
MB AE90	43 fl.oz	43 fl.oz	42 fl.oz	2.4		
3	238 fl.oz	238 fl.oz	238 fl.oz	0.0		
DELVO	372 fl.oz	372 fl.oz	370 fl.oz	0.5		

DryAggs: 22407 lb
Cems: 5330 lb
Waters: 2200 lb
Total: 30449 lb
Wat/Cem: 0.413
Add: 3 G

06:23:52a 07/24/15
Bottles Empty

	-Start-	-End-
AGG	0	20 lb
CEM	0	0 lb

eceived By

Center Redi Mix Inc.
P.O. Box 608
1504 W. Hwy 112
Center CO 81125
719-754-2744

Ticket No. 34413

Moltz Constructors Inc.
P.O. Box 1030
Cody WY 82414

Continental Dam Project
Creede West Hwy 149 past Clear
Creek past mi mark 48 Left
Rd 513 5 mi to job site

Today 8.00 yd

05:48:13a	8.00 yd	183.00 yd	37GS	
07/24/15	1	Ken Smith	3.00 in	5.00

00	4500PSI LH 7 Sack Class DF Concrete	183.00	189.75	1518.00

SubTotal $	1518.00
Tax 0.000	0.00
Total $	1518.00

05:55:40a

Order Total $28842.00

Ticket No. 34413

Batch size 8.00 yd

-Material-	-Indication-	- AVDP EQU -	- Targets ---	-% Tol-	WatFree	%Moist
3\4 AGG	12860 lb	12860 lb	12880 lb	-0.2	-321.5	0.00
SAND	5500 lb	5500 lb	5260 lb	4.6*	479.6	11.74
SAND3	5120 lb	5120 lb	5160 lb	-0.8	357.7	9.66
I-II	4280 lb	4280 lb	4225 lb	1.3*		
FLYASH	1055 lb	1055 lb	1055 lb	0.0		
H20	201 G	201 G	201 G	0.0	1677.3	
MB AE90	42 fl.oz	42 fl.oz	42 fl.oz	0.0		
3	238 fl.oz	238 fl.oz	238 fl.oz	0.0		
DELVO	372 fl.oz	372 fl.oz	370 fl.oz	0.5		

DryAggs:	22451 lb
Cems:	5335 lb
Waters:	2193 lb
Total:	30492 lb
Wat/Cem:	0.411
Add:	4 G

05:55:40a 07/24/15
Bottles Empty

	Start	End
AGG	0	-20 lb
CEM	0	0 lb

eceived By

Center Redi Mix Inc.
P.O. Box 608
1504 W. Hwy 112
Center CO 81125
719-754-2744

Ticket No. 34411

Moltz Constructors Inc.
P.O. Box 1030
Cody WY 82414

Continental Dam Project
Creede West Hwy 149 past Clear
Creek past mi mark 48 Left
Rd 513 5 mi to job site

Today 32.00 yd

11:32:53a	8.00 yd	159.00 yd	32JN	
07/23/15	4	Ken Smith	3.00 in	5.00

1.00	4500PSI LH 7 Sack Class DP Concrete	159.00	109.75	1510.00

SubTotal $	1518.00
Tax 0.000	0.00
Total $	1518.00

11:40:12a

Order Total $25806.00

Ticket No. 34411

Batch size 8.00 yd

Material	Indication	AVDP SQU	Targets	% Tol	WatFree	%Moist
3\4 AGG	12860 lb	12860 lb	12880 lb	-0.2	-321.5	0.00
SAND	5320 lb	5320 lb	5240 lb	1.5	446.6	11.35
SAND3	5140 lb	5140 lb	5180 lb	-0.8	375.3	10.04
I-II	4240 lb	4240 lb	4225 lb	0.4		
FLYASH	1055 lb	1055 lb	1055 lb	0.0		
H20	204 G	204 G	204 G	0.0	1702.4	
MB AE90	39 fl.oz	39 fl.oz	39 fl.oz	0.0		
[illegible]	238 fl.oz	238 fl.oz	238 fl.oz	0.0		
[illegible]	372 fl.oz	372 fl.oz	370 fl.oz	0.5		

DryAggs: 22309 lb
Cems: 5295 lb
Waters: 2203 lb
Total: 30317 lb
Wat/Cem: 0.416
Add: 1 G

11:40:12a 07/23/15
Bottles Empty

	Start	End
AGG	40	40 lb
CEM	0	0 lb

Received By

Center Redi Mix Inc.
P.O. Box 608
1504 W. Hwy 112
Center CO 81125
719-754-2744

Ticket No. 34410

Moltz Constructors Inc.
P.O. Box 1030
Cody WY 82414

Continental Dam Project
Creede West Hwy 149 past Clear
Creek past mi. mark 40 Left
Rd 513 5 mi to job site

Today 24.00 yd

11:08:05a	8.00 yd	159.00 yd	30DC	
07/23/15	3	Ken Smith	3.00 in	5.00

.00	4500PSI LH 7 Sack Class DP Concrete	159.00	189.75	1518.00

SubTotal $	1518.00
Tax 0.000	0.00
Total $	1518.00

11:15:22a

Order Total $24288.00

Ticket No. 34410

Batch size 8.00 yd

-Material-	-Indication-	- AVDP EQU -	- Targets -	- % Tol-	Wat	Free	%Moist
3\4 AGG	12840 lb	12840 lb	12880 lb	-0.3	-321.0		0.00
SAND	5400 lb	5400 lb	5240 lb	3.1*	462.1		11.54
SAND3	5140 lb	5140 lb	5180 lb	-0.8	391.1		10.40
I-II	4235 lb	4235 lb	4225 lb	0.2			
FLYASH	1055 lb	1055 lb	1055 lb	0.0			
H2O	200 G	200 G	200 G	0.0	1669.0		
MB AE90	40 fl.oz	40 fl.oz	39 fl.oz	2.6			
3[illegible]	238 fl.oz	238 fl.oz	238 fl.oz	0.0			
DE[illegible]0	372 fl.oz	372 fl.oz	370 fl.oz	0.5			

DryAggs:	22837 lb
Cems:	5290 lb
Waters:	2201 lb
Total:	30339 lb
Wat/Cem:	0.416
Add:	1 G

11:15:22a 07/23/15
Bottles Empty

	Start	End	
AGG	40	40	lb
CEM	0	0	lb

Received By [signature]

Center Redi Mix Inc.
P.O. Box 608
1504 W. Hwy 112
Center CO 81125
719-754-2744

Ticket No. 34409

Moltz Constructors Inc.
P.O. Box 1030
Cody WY 82414

Continental Dam Project
Creede West Hwy 149 past Clear
Creek past mi mark 48 Left
Rd 513 5 mi to job site

Today 16.00 yd

10:42:46a 8.00 yd 159.00 yd 3769

07/23/15 2 Ken Smith 3.00 in 5.00

00	4500PSI LH 7 Sack Class DP Concrete	159.00	189.75	1518.00

SubTotal $ 1518.00
Tax 0.000 0.00
Total $ 1518.00

10:48:55a

Order Total $22770.00

icket No. 34409

Batch size 8.00 yd

-Material-	-Indication-	- AVDP EQU -	- Targets -	-% Tol-	Wat	Free	%Moist
3\4 AGG	12860 lb	12860 lb	12880 lb	-0.2		-321.5	0.00
SAND	5420 lb	5420 lb	5240 lb	3.4*		454.9	11.35
SAND3	5160 lb	5160 lb	5200 lb	-0.8		394.7	10.45
I-II	4225 lb	4225 lb	4225 lb	0.0			
FLYASH	1055 lb	1055 lb	1055 lb	0.0			
H20	200 G	200 G	200 G	0.0		1669.0	
MB AE90	39 fl.oz	39 fl.oz	39 fl.oz	0.0			
3	238 fl.oz	238 fl.oz	238 fl.oz	0.0			
D 0	374 fl.oz	374 fl.oz	370 fl.oz	1.1			

DryAggs: 22400 lb
Cems: 5280 lb
Waters: 2197 lb
Total: 30389 lb
Wat/Cem: 0.416
Add: 1 G

10:48:55a 07/23/15
Bottles Empty

	Start	End	
AGG	20	40	lb
CEM	0	0	lb

eceived By

Center Redi Mix Inc.
P.O. Box 608
1504 W. Hwy 112
Center CO 81125
719-754-2744

Ticket No. 34408

Moltz Constructors Inc.
P.O. Box 1030
Cody WY 82414

Continental Dam Project
Creede West Hwy 149 past Clear
Creek past mi mark 48 Left
Rd 513 5 mi to job site

Today 8.00 yd

10:13:47a	8.00 yd	159.00 yd	33JV	
07/23/15	1	Ken Smith	3.00 in	5.00

00	4500PSI LH	7 Sack Class DP Concrete	159.00	189.75	1518.00

SubTotal $	1518.00
Tax 0.000	0.00
Total $	1518.00

10:20:43a

Order Total $21252.00

icket No. 34408

Batch size 8.00 yd

-Material-	-Indication-	- AVDP EQU -	- Targets -	-% Tol-	WatFree	%Moist
3\4 AGG	12840 lb	12840 lb	12880 lb	-0.3	-321.0	0.00
SAND	5420 lb	5420 lb	5240 lb	3.4*	457.2	11.40
SAND3	5160 lb	5160 lb	5200 lb	-0.8	394.2	10.44
I-II	4275 lb	4275 lb	4225 lb	1.2*		
FLYASH	1065 lb	1065 lb	1055 lb	0.9		
H20	200 G	200 G	200 G	0.0	1669.0	
MB_AE90	40 fl.oz	40 fl.oz	39 fl.oz	2.6		
3	238 fl.oz	238 fl.oz	238 fl.oz	0.0		
DELVO	374 fl.oz	374 fl.oz	370 fl.oz	1.1		

DryAggs:	22378 lb
Cems:	5340 lb
Waters:	2199 lb
Total:	30429 lb
Wat/Cem:	0.412
Add:	3 G

10:20:43a 07/23/15
Bottles Empty

	Start	End
AGG	0	40 lb
CEM	0	0 lb

eceived By

Center Redi Mix Inc.
P.O. Box 608
1504 W. Hwy 112
Center CO 81125
719-754-2744

Ticket No. 34403

Moltz Constructors Inc.
P.O. Box 1030
Cody WY 82414

Continental Dam Project
Creede West Hwy 149 past Clear
Creek past mi mark 48 Left
Rd 513 5 mi to job site

Today 24.00 yd

06:42:30a 8.00 yd 119.00 yd 30DC

07/22/15 3 Ken Smith 3.00 in 5.00

8.00	4500PSI LH 7 Sack Class DP Concrete	119.00	189.75	1518.00

SubTotal $ 1518.00
Tax 0.000 0.00
Total $ 1518.00

06:51:36a

Order Total $19734.00

Ticket No. 34403

Batch size 8.00 yd

-Material-	-Indication-	- AVDP EQU -	- Targets -	-% Tol-	WatFree	%Moist
3\4 AGG	12840 lb	12840 lb	12880 lb	-0.3	-321.0	0.00
SAND	5460 lb	5460 lb	5280 lb	3.4*	486.7	11.71
SAND3	5200 lb	5200 lb	5240 lb	-0.8	434.4	11.00
I-II	4285 lb	4285 lb	4225 lb	1.4*		
FLYASH	1055 lb	1055 lb	1055 lb	0.0		
H20	192 G	192 G	192 G	0.0	1602.6	
MB AE90	38 fl.oz	38 fl.oz	37 fl.oz	2.7		
322N	238 fl.oz	238 fl.oz	238 fl.oz	0.0		
DELVO	371 fl.oz	371 fl.oz	370 fl.oz	0.3		

DryAggs: 22411 lb
Cems: 5340 lb
Waters: 2202 lb
Total: 30442 lb
Wat/Cem: 0.412
Add: 3 G

Received By _____

06:51:36a 07/22/15
Bottles Empty

	Start	End	
AGG	0	0	lb
CEM	0	0	lb

Center Redi Mix Inc.
P.O. Box 608
1504 W. Hwy 112
Center CO 81125
719-754-2744

Ticket No. 34403

Moltz Constructors Inc.
P.O. Box 1030
Cody WY 82414

Continental Dam Project
Creede West Hwy 149 past Clear
Creek past mi mark 48 Left
Rd 513 5 mi to job site

Today 24.00 yd

06:42:30a 8.00 yd 119.00 yd 30DC

07/22/15 3 Ken Smith 3.00 in 5.00

8.00	4500PSI LH 7 Sack Class DP Concrete	119.00	189.75	1518.00

SubTotal $ 1518.00
Tax 0.000 0.00
Total $ 1518.00

06:51:36a

Order Total $19734.00

Ticket No. 34403

Batch size 8.00 yd

-Material-	-Indication-	- AVDP EQU -	- Targets --	-% Tol-	WatFree	%Moist
3\4 AGG	12840 lb	12840 lb	12880 lb	-0.3	-321.0	0.00
SAND	5460 lb	5460 lb	5280 lb	3.4*	486.7	11.71
SAND3	5200 lb	5200 lb	5240 lb	-0.8	434.4	11.02
I-II	4285 lb	4285 lb	4225 lb	1.4*		
FLYASH	1055 lb	1055 lb	1055 lb	0.0		
H20	192 G	192 G	192 G	0.0	1602.2	
MB AE90	38 fl.oz	38 fl.oz	37 fl.oz	2.7		
32[illegible]	238 fl.oz	238 fl.oz	238 fl.oz	0.0		
D[illegible]	371 fl.oz	371 fl.oz	370 fl.oz	0.3		

DryAggs: 22411 lb
Cems: 5340 lb
Waters: 2202 lb
Total: 30442 lb
Wat/Cem: 0.412
Add: 3 G

06:51:36a 07/22/15
Bottles Empty

	Start	End	
AGG	0	0	lb
CEM	0	0	lb

Received By

Center Redi Mix Inc.
P.O. Box 608
1504 W. Hwy 112
Center CO 81125
719-754-2744

Ticket No. 34402

Moltz Constructors Inc.
P.O. Box 1030
Cody WY 82414

Continental Dam Project
Creede West Hwy 149 past Clear
Creek past mi mark 40 Left
Rd 513 5 mi to job site

Today 16.00 yd

:11:30a 8.00 yd 113.00 yd 33.0

/22/15 2 Ken Smith 3.00 in 5.00

00 4500PSI LH Z Sack Class D/ Concrete 113.00 189.75 1518.00

SubTotal $ 1518.00
Tax 0.000 0.00
Total $ 1518.00

:19:14a

Order Total $10216.00

ket No. 34402

Batch size 8.00 yd

laterial	Indication	AVDP EQU	Targets	% Tol	Wat/Free	%Moist
4 AGG	12840 lb	12840 lb	12800 lb	-0.3	-321.0	0.00
ND	5520 lb	5520 lb	5260 lb	4.9*	483.6	11.52
ND3	5180 lb	5180 lb	5220 lb	-0.8	415.9	10.63
-11	4295 lb	4295 lb	4225 lb	1.7*		
YASH	1065 lb	1065 lb	1055 lb	0.9		
0	194 G	194 G	194 G	0.0	1618.9	
0890	38 fl.oz	38 fl.oz	37 fl.oz	2.7		
	238 fl.oz	238 fl.oz	238 fl.oz	0.0		
3L90	372 fl.oz	372 fl.oz	370 fl.oz	0.5		

DryAggs: 22472 lb
Cems: 5360 lb
Waters: 2197 lb
Total: 30519 lb
Wat/Cem: 0.410
Add: 5 G

06:19:14a 07/22/15
Bottles Empty

	Start	End	
AGG	0	0	lb
CEM	0	0	lb

eived By_____

Center Redi Mix Inc.
P.O. Box 608
1504 W. Hwy 112
Center CO 81125
719-754-2744

Ticket No. 34402

Moltz Constructors Inc.
P.O. Box 1030
Cody WY 82414

Continental Dam Project
Creede West Hwy 149 past Clear
Creek past mi mark 48 Left
Rd 513 5 mi to job site

Today 16.00 yd

06:11:30a	8.00 yd	119.00 yd	33JV
07/22/15	2	Ken Smith	3.00 in 5.00

00	4500PSI LH 7 Sack Class DP Concrete	119.00	189.75	1518.00

SubTotal $ 1518.00
Tax 0.000% 0.00
Total $ 1518.00

Order Total $18216.00

Ticket No. 34402

Batch size 8.00 yd

-Material-	-Indication-	- AVDP EQU -	- Targets -	-% Tol-	WatFree	%Moist
3\4 AGG	12840 lb	12840 lb	12880 lb	-0.3	-321.0	0.00
SAND	5520 lb	5520 lb	5260 lb	4.9*	483.6	11.52
SAND3	5180 lb	5180 lb	5220 lb	-0.8	415.9	10.63
I-II	4295 lb	4295 lb	4225 lb	1.7*		
FLYASH	1065 lb	1065 lb	1055 lb	0.9*		
H20	194 G	194 G	194 G	0.0	1[illegible]8.9	
MB AE90	38 fl.oz	38 fl.oz	37 fl.oz	2.7		
3	238 fl.oz	238 fl.oz	238 fl.oz	0.0		
DEL90	372 fl.oz	372 fl.oz	370 fl.oz	0.5		

DryAggs: 22472 lb
Cems: 5360 lb
Waters: 2197 lb
Total: 30519 lb
Wat/Cem: 0.410
Add: 5 G

06:19:14a 07/22/15
Bottles Empty

	Start	End
AGG	0	0 lb
CEM	0	0 lb

Received By

Center Redi Mix Inc.
P.O. Box 608
1504 W. Hwy 112
Center CO 81125
719-754-2744

Ticket No. 34401

Moltz Constructors Inc.
P.O. Box 1030
Cody WY 82414

Continental Dam Project
Creede West Hwy 149 past Clear
Creek past mi mark 48 Left
Rd 513 5 mi to job site

Today 8.00 yd

05:44:12a 8.00 yd 119.00 yd 3765

07/22/15 1 Ken Smith 3.00 in 5.00

8.00	4500PSI LH / Sack Class DR Concrete	119.00	189.75	1518.00

SubTotal $ 1518.00
Tax 0.000 0.00
Total $ 1518.00

05:51:19a

Order Total $16698.00

Ticket No. 34401

Batch size 8.00 yd

-Material-	-Indication-	- AVDP EQU -	- Targets --	-% Tol-	WatFree	%Moist
3\4 AGG	12840 lb	12840 lb	12880 lb	-0.3	-321.0	0.00
SAND	5440 lb	5440 lb	5280 lb	3.0*	483.2	11.67
SAND3	5200 lb	5200 lb	5240 lb	-0.8	430.2	10.93
I-II	4260 lb	4260 lb	4225 lb	0.8		
FLYASH	1060 lb	1060 lb	1055 lb	0.5		
H20	193 G	193 G	193 G	0.0	1610.6	
WR AE90	41 fl.oz	41 fl.oz	40 fl.oz	2.5		
R22N	238 fl.oz	238 fl.oz	238 fl.oz	0.0		
DELVO	372 fl.oz	372 fl.oz	370 fl.oz	0.5		

DryAggs: 22399 lb
Cems: 5320 lb
Waters: 2203 lb
Total: 30411 lb
Wat/Cems 0.414
Add: 2 G

05:51:19a 07/22/15
Bottles Empty

	Start	End
AGG	0	0 lb
CEM	0	0 lb

Received By_____

Center Redi Mix Inc.
P.O. Box 608
1504 W. Hwy 112
Center CO 81125
719-754-2744

Ticket No. 34401

Moltz Constructors Inc.
P.O. Box 1030
Cody WY 82414

Continental Dam Project
Creede West Hwy 149 past Clear
Creek past mi mark 48 Left
Rd 513 5 mi to job site

Today 8.00 yd

05:44:12a	8.00 yd	119.00 yd	3765
07/22/15	1	Ken Smith	3.00 in 5.00

.00	4500PSI LH	7 Sack Class DP Concrete	119.00	189.75	1518.00

SubTotal $	1518.00
Tax 0.000	0.00
Total $	1518.00

05:51:19a

Order Total $16698.00

Ticket No. 34401

Batch size 8.00 yd

-Material-	-Indication-	- AVDP EQU -	- Targets	-- -% Tol-	WatFree	%Moist
3\4 AGG	12840 lb	12840 lb	12880 lb	-0.3	-321.0	0.00
SAND	5440 lb	5440 lb	5280 lb	3.0*	483.2	11.67
SAND3	5200 lb	5200 lb	5240 lb	-0.8	430.2	10.93
I-II	4260 lb	4260 lb	4225 lb	0.8		
FLYASH	1060 lb	1060 lb	1055 lb	0.5		
H20	193 G	193 G	193 G	0.0	1610.6	
MB AE90	41 fl.oz	41 fl.oz	40 fl.oz	2.5		
3	238 fl.oz	238 fl.oz	238 fl.oz	0.0		
DELVO	372 fl.oz	372 fl.oz	370 fl.oz	0.5		

DryAggs:	22399 lb
Cems:	5320 lb
Waters:	2203 lb
Total:	30411 lb
Wat/Cem:	0.414
Add:	2 G

05:51:19a 07/22/15
Bottles Empty

	Start	End
AGG	0	0 lb
CEM	0	0 lb

eceived By

Center Redi Mix Inc.
P.O. Box 608
1504 W. Hwy 112
Center CO. 81125
719-754-2744

Ticket No. 34399

Moltz Constructors Inc.
P.O. Box 1030
Cody WY 82414

Continental Dam Project
Creede West Hwy 149 past Clear
Creek past mi mark 48 Left
Rd 513 5 mi to job site

Today 32.00 yd

12:31:23p 8.00 yd 95.00 yd 32JN

07/21/15 4 Ken Smith 3.00 in 5.00

.00 4500PSI LH 7 Sack Class DP Concrete 95.00 189.75 1518.00

SubTotal $ 1518.00
Tax 0.000 0.00
Total $ 1518.00

12:37:46p

Order Total $15180.00

icket No. 34399

Batch size 8.00 yd

-Material-	-Indication-	- AVDP EQU -	- Targets --	-% Tol-	WatFree	%Moist
3\4 AGG	12840 lb	12840 lb	12880 lb	-0.3	-321.0	0.00
SAND	5440 lb	5440 lb	5260 lb	3.4*	481.0	11.89
SAND3	5160 lb	5160 lb	5200 lb	-0.8	411.0	10.83
I-II	4220 lb	4220 lb	4225 lb	-0.1		
FLYASH	1065 lb	1065 lb	1055 lb	0.9		
H20	195 G	195 G	195 G	0.0	1627.3	
MR AE90	47 fl.oz	47 fl.oz	47 fl.oz	0.0		
[illegible]	238 fl.oz	238 fl.oz	238 fl.oz	0.0		
DELVO	371 fl.oz	371 fl.oz	370 fl.oz	0.3		

DryAggs: 22358 lb
Cems: 5285 lb
Waters: 2198 lb
Total: 30352 lb
Wat/Cem: 0.416
Add: 1 G

12:37:46p 07/21/15
Bottles Empty

	Start	End	
AGG	0	0	lb
CEM	0	0	lb

eceived By

Center Redi Mix Inc.
P.O. Box 608
1504 W. Hwy 112
Center CO 81125
719-754-2744

Ticket No. 34399

Moltz Constructors Inc.
P.O. Box 1030
Cody WY 82414

Continental Dam Project
Creede West Hwy 149 past Clear
Creek past mi mark 40 Left
Rd 513 5 mi to job site

Today 32.00 yd

12:31:23p 8.00 yd 95.00 yd 32JN

07/21/15 4 Ken Smith 3.00 in 5.00

.00 4500PSI LH 7 Sack Class DP Concrete 95.00 189.75 1518.00

SubTotal $ 1518.00
Tax 0.000 0.00
Total $ 1518.00

12:37:46p

Order Total $15180.00

icket No. 34399

Batch size 8.00 yd

-Material-	-Indication-	- AVDP EQU -	- Targets ---	-% Tol-	Wat/Free	%Moist
3\4 AGG	12840 lb	12840 lb	12880 lb	-0.3	-321.0	0.00
SAND	5440 lb	5440 lb	5260 lb	3.4*	481.0	11.89
SAND3	5160 lb	5160 lb	5200 lb	-0.8	411.0	10.83
I-II	4220 lb	4220 lb	4225 lb	-0.1		
FLYASH	1065 lb	1065 lb	1055 lb	0.9		
H20	195 G	195 G	195 G	0.0	1627.3	
MB AE90	47 fl.oz	47 fl.oz	47 fl.oz	0.0		
[illegible]	238 fl.oz	238 fl.oz	238 fl.oz	0.0		
DELVO	371 fl.oz	371 fl.oz	370 fl.oz	0.3		

DryAggs: 22358 lb
Cems: 5285 lb
Waters: 2198 lb
Total: 30352 lb
Wat/Cem: 0.416
Add: 1 G

12:37:46p 07/21/15
Bottles Empty

	Start	End
AGG	0	0 lb
CEM	0	0 lb

eceived By

Center Redi Mix Inc.
P.O. Box 608
1504 W. Hwy 112
Center CO 81125
719-754-2744

Ticket No. 34398

Moltz Constructors Inc.
P.O. Box 1030
Cody WY 82414

Continental Dam Project
Creede West Hwy 149 past Clear
Creek past mi mark 48 Left
Rd 513 5 mi to job site

Today 24.00 yd

:09:06p 8.00 yd 95.00 yd 3765

/21/15 3 Ken Smith 3.00 in 5.00

00 4500PSI LH 7 Sack Class DP Concrete 95.00 189.75 1518.00

SubTotal $ 1518.00
Tax 0.000 0.00
Total $ 1518.00

:15:39p

Order Total $13662.00

cket No. 34398

Batch size 8.00 yd

Material	Indication	AVDP	EDU	Targets	-% Tol	Wat	Free	%Moist
4 AGG	12840 lb	12840 lb		12880 lb	-0.3	-321.0		0.00
ND	5420 lb	5420 lb		5260 lb	3.0*	481.5		11.94
ND3	5180 lb	5180 lb		5220 lb	-0.8	423.7		11.09
-II	4235 lb	4235 lb		4225 lb	0.2			
YASH	1065 lb	1065 lb		1055 lb	0.9			
0	194 G	194 G		194 G	0.0	1618.9		
8 AE90	47 fl.oz	47 fl.oz		47 fl.oz	0.0			
	238 fl.oz	238 fl.oz		238 fl.oz	0.0			
5L.90	373 fl.oz	373 fl.oz		370 fl.oz	0.8			

DryAggs: 22345 lb
Cems: 5300 lb
Waters: 2203 lb
Total: 30359 lb
Wat/Cem: 0.416
Add: 1 G

12:15:38p 07/21/15
Bottles Empty

	Start	End	
AGG	0	0	lb
CEM	0	0	lb

ceived By_____

Center Redi Mix Inc.
P.O. Box 608
1504 W. Hwy 112
Center CO 81125
719-754-2744

Ticket No. 34398

Moltz Constructors Inc.
P.O. Box 1030
Cody WY 82414

Continental Dam Project
Creede West Hwy 149 past Clear
Creek past mi mark 48 Left
Rd 513 5 mi to job site

Today 24.00 yd

12:09:06p 8.00 yd 95.00 yd 3766

07/21/15 3 Ken Smith 3.00 in 5.00

8.00 4500PSI LH 7 Sack Class DP Concrete 95.00 189.75 1518.00

SubTotal $ 1518.00
Tax 0.000 0.00
Total $ 1518.00

12:15:38p

Order Total $13662.00

Ticket No. 34398

Batch size 8.00 yd

-Material-	-Indication-	- AVDP EQU -	- Targets -	-% Tol-	WatFree	%Moist
3\4 AGG	12840 lb	12840 lb	12880 lb	-0.3	-321.0	0.00
SAND	5420 lb	5420 lb	5260 lb	3.0*	481.5	11.94
SAND3	5180 lb	5180 lb	5220 lb	-0.8	423.7	11.09
I-II	4235 lb	4235 lb	4225 lb	0.2		
FLYASH	1065 lb	1065 lb	1055 lb	0.9		
H20	194 G	194 G	194 G	0.0	1618.9	
MB AE90	47 fl.oz	47 fl.oz	47 fl.oz	0.0		
N	238 fl.oz	238 fl.oz	238 fl.oz	0.0		
DELVO	373 fl.oz	373 fl.oz	370 fl.oz	0.8		

DryAggs: 22345 lb
Cems: 5300 lb
Waters: 2203 lb
Total: 30359 lb
Wat/Cem: 0.416
Add: 1 G

12:15:38p 07/21/15
Bottles Empty

	Start	End	
AGG	0	0	lb
CEM	0	0	lb

Received By

Center Redi Mix Inc.
P.O. Box 608
1504 W. Hwy 112
Center CO 81125
719-754-2744

Ticket No. 34397

Moltz Constructors Inc.
P.O. Box 1030
Cody WY 82414

Continental Dam Project
Creede West Hwy 149 past Clear
Creek past mi mark 48 Left
Rd 513 5 mi to job site

Today 16.00 yd

1:45:39a 8.00 yd 95.00 yd 33JV

7/21/15 2 Ken Smith 3.00 in 5.00

00	4500PSI LH 7 Sack Class DP Concrete		95.00	189.75	1518.00

SubTotal $ 1518.00
Tax 0.000 0.00
Total $ 1518.00

:51:47a

Order Total $12144.00

ket No. 34397

Batch size 8.00 yd

aterial	-Indication-	- AVDP EQU -	- Targets	-- -% Tol-	WatFree	%Moist
4 AGG	12840 lb	12840 lb	12880 lb	-0.3	-321.0	0.00
ND	5480 lb	5480 lb	5280 lb	3.8*	503.0	12.31
ND3	5180 lb	5180 lb	5220 lb	-0.8	428.5	11.20
II	4260 lb	4260 lb	4225 lb	0.8		
YASH	1060 lb	1060 lb	1055 lb	0.5		
0	190 G	190 G	190 G	0.0	1585.6	
AE90	47 fl.oz	47 fl.oz	47 fl.oz	0.0		
	238 fl.oz	238 fl.oz	238 fl.oz	0.0		
	373 fl.oz	373 fl.oz	370 fl.oz	0.8		

DryAggs: 22378 lb
Cems: 5320 lb
Waters: 2196 lb
Total: 30406 lb
Wat/Cem: 0.413
Add: 3 G

11:51:47a 07/21/15
Bottles Empty

	Start	End
AGG	0	20 lb
CEM	0	0 lb

eived By_____

Center Redi Mix Inc.
P.O. Box 600
1504 W. Hwy 112
Center CO 81125
719-754-2744

Ticket No. 34397

Moltz Constructors Inc.
P.O. Box 1030
Cody WY 82414

Continental Dam Project
Creede West Hwy 149 past Clear
Creek past mi mark 48 Left
Rd 513 5 mi to job site

Today 16.00 yd

11:45:39a	8.00 yd	95.00 yd	33JV	
07/21/15	2	Ken Smith	3.00 in	5.00

.00	4500PSI LH 7 Sack Class DP Concrete	95.00	189.75	1518.00

SubTotal $	1518.00
Tax 0.000	0.00
Total $	1518.00

11:51:47a

Order Total $12144.00

icket No. 34397

Batch size= 8.00 yd

-Material-	-Indication-	- AVDP EQU -	- Targets -	-% Tol-	WatFree	%Moist
3\4 AGG	12840 lb	12840 lb	12880 lb	-0.3	-321.0	0.00
SAND	5480 lb	5480 lb	5280 lb	3.8*	503.0	12.31
SAND3	5180 lb	5180 lb	5220 lb	-0.8	428.5	11.20
I-II	4260 lb	4260 lb	4225 lb	0.8		
FLYASH	1060 lb	1060 lb	1055 lb	0.5		
H20	190 G	190 G	190 G	0.0	1585.6	
MR 9E90	47 fl.oz	47 fl.oz	47 fl.oz	0.0		
[illegible]	238 fl.oz	238 fl.oz	238 fl.oz	0.0		
DELVO	373 fl.oz	373 fl.oz	370 fl.oz	0.8		

DryAggs:	22378 lb
Cems:	5320 lb
Waters:	2196 lb
Total:	30406 lb
Wat/Cem:	0.413
Add:	3 G

11:51:47a 07/21/15
Bottles Empty

	Start	End
AGG	0	20 lb
CEM	0	0 lb

eceived By

Center Redi Mix Inc.
P.O. Box 608
1504 W. Hwy 112
Center CO 81125
719-754-2744

Ticket No. 34396

Moltz Constructors Inc.
P.O. Box 1030
Cody WY 82414

Continental Dam Project
Creede West Hwy 149 past Clear
Creek past mi mark 48 Left
Rd 513 5 mi to job site

Today 8.00 yd

21:31a 8.00 yd 95.00 yd 30DC

21/15 1 Ken Smith 3.00 in 5.00

	4500@51 LH 7 Sack Class DP Concrete	95.00	189.75	1518.00	

SubTotal $ 1518.00
Tax 0.000 0.00
Total $ 1515.00

28:55a

Order Total $10625.00

et No. 34396

Batch size 8.00 yd

terial-	-Indication-	- AVDP EQU -	- Targets	-- -% Tol-	WatFree	%Moist
AGG	12860 lb	12860 lb	12880 lb	-0.2	-321.5	0.00
D	5420 lb	5420 lb	5260 lb	3.0*	409.2	12.12
D3	5180 lb	5180 lb	5220 lb	-0.8	430.0	11.23
I	4230 lb	4230 lb	4225 lb	0.1		
ASH	1060 lb	1060 lb	1055 lb	0.5		
	192 G	192 G	192 G	0.0	1602.2	
AE90	48 fl.oz	48 fl.oz	47 fl.oz	2.1		
	238 fl.oz	238 fl.oz	238 fl.oz	0.0		
VR	374 fl.oz	374 fl.oz	370 fl.oz	1.1		

DryAggs: 22351 lb
Cems: 5290 lb
Waters: 2200 lb
Total: 30352 lb
Wat/Cem: 0.416
Add: 1 G

11:28:55a 07/21/15
Bottles Empty

	Start	End	
AGG	20	20	lb
CEM	0	0	lb

eived By_____

Center Redi Mix Inc.
P.O. Box 608
1504 W. Hwy 112
Center CO 81125
719-754-2744

Ticket No. 34396

Moltz Constructors Inc.
P.O. Box 1030
Cody WY 82414

Continental Dam Project
Creede West Hwy 149 past Clear
Creek past mi mark 48 Left
Rd 513 5 mi to job site

Today 8.00 yd

11:21:31a	8.00 yd	95.00 yd	30DC	
07/21/15	1	Ken Smith	3.00 in	5.00

.00	4500PSI LH 7 Sack Class DP Concrete	95.00	189.75	1518.00

SubTotal $	1518.00
Tax 0.000	0.00
Total $	1518.00

11:28:55a

Order Total $10626.00

Ticket No. 34396

Batch size 8.00 yd

-Material-	-Indication-	- AVDP EQU -	- Targets --	-% Tol-	WatFree	%Moist
3\4 AGG	12860 lb	12860 lb	12880 lb	-0.2	-321.5	0.00
SAND	5420 lb	5420 lb	5260 lb	3.0*	489.2	12.12
SAND3	5180 lb	5180 lb	5220 lb	-0.8	430.0	11.23
I-II	4230 lb	4230 lb	4225 lb	0.1		
FLYASH	1060 lb	1060 lb	1055 lb	0.5		
H20	192 G	192 G	192 G	0.0	1602.2	
MB AE90	48 fl.oz	48 fl.oz	47 fl.oz	2.1		
[illegible]	238 fl.oz	238 fl.oz	238 fl.oz	0.0		
DELVO	374 fl.oz	374 fl.oz	370 fl.oz	1.1		

DryAggs:	22351 lb
Cems:	5290 lb
Waters:	2200 lb
Total:	30352 lb
Wat/Cem:	0.416
Add:	1 G

11:28:55a 07/21/15
Bottles Empty

	Start	End	
AGG	20	20	lb
CEM	0	0	lb

Received By

Center Redi Mix Inc.
P.O. Box 608
1504 W. Hwy 112
Center CO 81125
719-754-2744

Ticket No. 34377

Moltz Constructors Inc.
P.O. Box 1030
Cody WY 82414

Continental Dam Project
Creede West Hwy 149 past Clear
Creek past mi mark 48 Left
Rd 513 5 mi to job site

Today 16.00 yd

01:19:37p 8.00 yd 63.00 yd 3IKS

07/17/15 2 Ken Smith 3.00 in 5.00

.00	4500PSI LH 7 Sack Class DP Concrete		63.00	199.75	1518.00

SubTotal $ 1518.00
Tax 0.000 0.00
Total $ 1518.00

01:26:18p

Order Total $ 9108.00

Ticket No. 34377

Batch size 8.00 yd

-Material-	-Indication-	- AVDP EDU -	- Targets -	+/- Tol-	WatFree	%Moist
3\4 AGG	12800 lb	12800 lb	12840 lb	-0.3	-352.0	0.00
SAND	5520 lb	5520 lb	5260 lb	4.9*	490.9	11.96
SAND3	5200 lb	5200 lb	5240 lb	-0.8	434.5	11.31
I-II	4265 lb	4265 lb	4225 lb	0.9		
FLYASH	1055 lb	1055 lb	1055 lb	0.0		
H20	195 G	195 G	195 G	0.0	1527.3	
MB_AE90	49 fl.oz	49 fl.oz	48 fl.oz	2.1		
	238 fl.oz	238 fl.oz	238 fl.oz	0.0		
DELVD	373 fl.oz	373 fl.oz	370 fl.oz	0.8		

DryAggs: 22402 lb
Cems: 5320 lb
Waters: 2201 lb
Total: 30467 lb
Wat/Cem: 0.414
Add: 2 G

01:26:18p 07/17/15
Bottles Empty
-----Start---End-------
AGG 0 20 lb
CEM 0 0 lb

Received By

Center Redi Mix Inc.
P.O. Box 608
1504 W. Hwy 112
Center CO 81125
719-754-2744

Ticket No. 34377

Moltz Constructors Inc.
P.O. Box 1030
Cody WY 82414

Continental Dam Project
Creede West Hwy 149 past Clear
Creek past mi mark 48 Left
Rd 513 5 mi to job site

Today 16.00 yd

01:19:37p 8.00 yd 63.00 yd 31K5

07/17/15 2 Ken Smith 3.00 in 5.00

8.00	4500PSI LH 7 Sack Class DP Concrete		63.00	189.75	1518.00

Subtotal $	1518.00
Tax 0.000	0.00
Total $	1518.00

01:26:18p

Order Total $ 9108.00

Ticket No. 34377

Batch size 8.00 yd

-Material-	-Indication-	- AVDP EQU -	- Targets --	-% Tol-	WatFree	%Moist
3\4 ABB	12800 lb	12800 lb	12840 lb	-0.3	-352.0	0.00
SAND	5520 lb	5520 lb	5260 lb	4.9*	490.9	11.96
SAND3	5200 lb	5200 lb	5240 lb	-0.8	434.9	11.31
I-II	4265 lb	4265 lb	4225 lb	0.9		
FLYASH	1055 lb	1055 lb	1055 lb	0.0		
H20	195 G	195 G	195 G	0.0	1627.3	
MB AE90	49 fl.oz	49 fl.oz	48 fl.oz	2.1		
2N	238 fl.oz	238 fl.oz	238 fl.oz	0.0		
DEL.VD	373 fl.oz	373 fl.oz	370 fl.oz	0.8		

DryAggs:	22402 lb
Cems:	5320 lb
Waters:	2201 lb
Total:	30467 lb
Wat/Cem:	0.414
Add:	2 G

01:26:18p 07/17/15
Bottles Empty

	Start	End
AGG	0	20 lb
CEM	0	0 lb

Received By_____

Center Redi Mix Inc.
P.O. Box 608
1504 W. Hwy 112
Center CO 81125
719-754-2744

Ticket No. 34376

Moltz Constructors Inc.
P.O. Box 1030
Cody WY 82414

Continental Dam Project
Creede West Hwy 149 past Clear
Creek past mi mark 48 Left
Rd 513 5 mi to job site

Today 8.00 yd

12:51:15p	8.00 yd	63.00 yd	30DC	
07/17/15	1	Ken Smith	3.00 in	5.00

5.00	4500PSI LH 7 Sack Class DP Concrete	63.00	189.75	1518.00

SubTotal $	1518.00
Tax 0.000	0.00
Total $	1518.00

01:00:58p

Order Total $ 7590.00

Ticket No. 34376

Batch size 8.00 yd

-Material-	-Indication-	- AVDP EQU -	- Targets --	-% Tol-	WatFree	%Moist
3\4 AGG	12820 lb	12820 lb	12840 lb	-0.2	-352.5	0.00
SAND	5560 lb	5560 lb	5280 lb	5.3*	516.0	12.44
SAND3	5200 lb	5200 lb	5240 lb	-0.8	440.7	11.45
I-II	4265 lb	4265 lb	4225 lb	0.9		
FLYASH	1055 lb	1055 lb	1055 lb	0.0		
H20	191 G	191 G	191 G	0.0	1593.9	
MB AE90	53 fl.oz	53 fl.oz	53 fl.oz	0.0		
322N	238 fl.oz	238 fl.oz	238 fl.oz	0.0		
DELVO	371 fl.oz	371 fl.oz	370 fl.oz	0.3		

DryAggs:	22431 lb
Cems:	5320 lb
Waters:	2198 lb
Total:	30494 lb
Wat/Cem:	0.413
Add:	3 G

01:00:58p 07/17/15
Bottles Empty

	Start	End
AGG	0	0 lb
CEM	0	0 lb

Received By_____

Center Redi Mix Inc.
P.O. Box 608
1504 W. Hwy 112
Center CO 81125
719-754-2744

Ticket No. 34376

Moltz Constructors Inc.
P.O. Box 1030
Cody WY 82414

Continental Dam Project
Creede West Hwy 149 past Clear
Creek past mi mark 48 Left
Rd 513 5 mi to job site

Today 8.00 yd

12:51:15p	8.00 yd	63.00 yd	30DC	
07/17/15	1	Ken Smith	3.00 in	5.00

.00	4500PSI LH 7 Sack Class DP Concrete	63.00	189.75	1518.00

SubTotal $	1518.00
Tax 0.000	0.00
Total $	1518.00

01:00:58p

Order Total $ 7590.00

Ticket No. 34376

Batch size 8.00 yd

-Material-	-Indication-	- AVDP EQU -	- Targets --	-% Tol-	Wat	Free	%Moist
3\4 AGG	12820 lb	12820 lb	12840 lb	-0.2	-352.5		0.00
SAND	5560 lb	5560 lb	5280 lb	5.3*	516.0		12.44
SAND3	5200 lb	5200 lb	5240 lb	-0.8	440.7		11.45
I-II	4265 lb	4265 lb	4225 lb	0.9			
FLYASH	1055 lb	1055 lb	1055 lb	0.0			
H20	191 G	191 G	191 G	0.0	1593.9		
MP-9E90	53 fl.oz	53 fl.oz	53 fl.oz	0.0			
[illegible]	238 fl.oz	238 fl.oz	238 fl.oz	0.0			
DELVO	371 fl.oz	371 fl.oz	370 fl.oz	0.3			

DryAggs: 22431 lb
Cems: 5320 lb
Waters: 2198 lb
Total: 30494 lb
Wat/Cem: 0.413
Add: 3 0

01:00:58p 07/17/15
Bottles Empty
-----Start----End-------
AGG 0 0 lb
CEM 0 0 lb

Received By [signature]

Center Redi Mix Inc.
P.O. Box 600
1504 W. Hwy 112
Center CO 81125
719-754-2744

Ticket No. 34364

Moltz Constructors Inc.
P.O. Box 1030
Cody WY 82414

Continental Dam Project
Creede West Hwy 149 past Clear
Creek Mi Mark 48 Left Rd 513

Today 32.00 yd

11:26:29a 8.00 yd 47.00 yd

07/16/15 4 Ken Smith 3.00 in 5.00

.00	4500PSI LH 7 Sack Class DP Concrete	47.00	189.75	1518.00

Subtotal $	1518.00
Tax 0.000	0.00
Total $	1518.00

11:33:07a

Order Total $ 6072.00

Ticket No. 34364

Batch size 8.00 yd

-Material-	-Indication-	AVDP	EQU	Targets	-% Tol-	Wat	Free	%Moist
3\4 AGG	12800 lb	12800	lb	12840 lb	-0.3	-352.0		0.00
SAND	5540 lb	5540	lb	5320 lb	4.1*	537.0		12.28
SAND3	5300 lb	5300	lb	5340 lb	-0.7	537.2		12.73
I-II	4235 lb	4235	lb	4225 lb	0.2			
FLYASH	1055 lb	1055	lb	1055 lb	0.0			
H20	178 G	178	G	178 G	0.0	1485.4		
[illegible] AE90	64 fl.oz	64	fl.oz	63 fl.oz	1.6			
[illegible]	240 fl.oz	240	fl.oz	238 fl.oz	0.8			
DELVO	371 fl.oz	371	fl.oz	370 fl.oz	0.3			

DryAggs:	22436 lb
Cems:	5290 lb
Waters:	2208 lb
Total:	30415 lb
Wat/Cem:	0.417
Add:	0 G

11:33:07a 07/16/15
Bottles Empty

	Start	End
AGG	0	20 lb
CEM	0	0 lb

Received By

Center Redi Mix Inc.
P.O. Box 608
1504 W. Hwy 112
Center CO 81125
719-754-2744

Ticket No. 34363

Moltz Constructors Inc.
P.O. Box 1030
Cody WY 82414

Continental Dam Project
Creede West Hwy 149 past Clear
Creek Mi Mark 48 Left Rd 513

Today 24.00 yd

10:40:38a 8.00 yd 39.00 yd 33.JV

07/16/15 3 Ken Smith 3.00 in 5.00

.00 4500PSI LH_7 Sack Class DP Concrete 39.00 189.75 1518.00

SubTotal $ 1518.00
Tax 0.000 0.00
Total $ 1518.00

10:47:23a

Order Total $ 4554.00

icket No. 34363

Batch size 8.00 yd

-Material-	-Indication-	- AvDP EQU -	- Targets --	-% Tol-	WatFree	%Moist
3\4 AGG	12820 lb	12820 lb	12840 lb	-0.2	-352.5	0.00
SAND	5420 lb	5420 lb	5320 lb	1.9	523.2	12.23
SAND3	5280 lb	5200 lb	5320 lb	-0.8	507.9	12.08
I-II	4275 lb	4275 lb	4225 lb	1.2*		
FLYASH	1055 lb	1055 lb	1055 lb	0.0		
H20	183 G	183 G	183 G	0.0	1527.1	
MB AE90	64 fl.oz	64 fl.oz	63 fl.oz	1.6		
[illegible]	238 fl.oz	238 fl.oz	238 fl.oz	0.0		
DELVO	371 fl.oz	371 fl.oz	370 fl.oz	0.3		

DryAggs: 22360 lb
Cems: 5330 lb
Waters: 2206 lb
Total: 30277 lb
Wat/Cem: 0.414
Add: 2 G

10:47:23a 07/16/15
Bottles Empty

	Start	End	
AGG	0	0	lb
CEM	0	0	lb

eceived By_____

Center Redi Mix Inc.
P.O. Box 608
1504 W. Hwy 112
Center CO 81125
719-754-2744

Ticket No. 34362

Moltz Constructors Inc.
P.O. Box 1030
Cody WY 82414

Continental Dam Project
Creede West Hwy 149 past Clear
Creek Mi Mark 48 Left Rd 513

Today 16.00 yd

09:40:53a 8.00 yd 39.00 yd 32JN

07/16/15 2 Ken Smith 3.00 in 5.00

.00 4500PSI LH 7 Sack Class DP Concrete 39.00 189.75 1518.00

@ 12:36
Slump = 2"
Air = 5.2
weight = 150.0
T = 70°

09:47:51a

SubTotal $ 1518.00
Tax 0.000 0.00
Total $ 1518.00

Order Total $ 3036.00

icket No. 34362

Batch size 8.00 yd

-Material-	-Indication-	- AVDP EQU -	- Targets -	-% Tol-	WatFree	%Moist
3\4 AGG	12820 lb	12820 lb	12840 lb	-0.2	-352.5	0.00
SAND	5520 lb	5520 lb	5320 lb	3.8*	533.4	12.25
SAND3	5260 lb	5260 lb	5300 lb	-0.8	489.0	11.68
I-II	4265 lb	4265 lb	4225 lb	0.9		
FLYASH	1060 lb	1060 lb	1055 lb	0.5		
H20	184 G	184 G	184 G	0.0	1535.5	
MB AE90	64 fl.oz	64 fl.oz	63 fl.oz	1.6		
[illegible]	238 fl.oz	238 fl.oz	238 fl.oz	0.0		
DELVO	372 fl.oz	372 fl.oz	370 fl.oz	0.5		

DryAggs: 22448 lb
Cems: 5325 lb
Waters: 2205 lb
Total: 30460 lb
Wat/Cem: 0.414
Add: 2 G

09:47:51a 07/16/15
Bottles Empty

	Start	End
AGG	0	0 lb
CEM	0	0 lb

eceived By

REPRINT

Center Redi Mix Inc.
P.O. Box 608
1504 W. Hwy 112
Center CO 81125
719-754-2744

Ticket No. 34361

Moltz Constructors Inc.
P.O. Box 1030
Cody WY 82414

Continental Dam Project
Creede West Hwy 149 past Clear
Creek Mi Mark 48 Left Rd 513

Today 8.00 yd

08:58:12a 8.00 yd 39.00 yd 37GS

07/16/15 1 Ken Smith 3.00 in 5.00

.00 4500PSI LH .7 Sack Class DP Concrete 39.00 189.75 1518.00

SubTotal $ 1518.00
Tax 0.000 0.00
Total $ 1518.00

09:04:28a

Order Total $ 942.00

icket No. 34361

Batch size 8.00 yd

-Material-	-Indication-	- AVDP EQU -	- Targets -	-% Tol-	WatFree	%Moist
3\4 AGG	12800 lb	12800 lb	12840 lb	-0.3	-352.0	0.00
SAND	5420 lb	5420 lb	5300 lb	2.3	500.1	11.71
SAND3	5220 lb	5220 lb	5260 lb	-0.8	455.1	10.98
I-II	4240 lb	4240 lb	4225 lb	0.4		
FLYASH	1060 lb	1060 lb	1055 lb	0.5		
H20	192 G	192 G	192 G	0.0	1602.2	
MB AE90	64 fl.oz	64 fl.oz	63 fl.oz	1.6		
[illegible]	238 fl.oz	238 fl.oz	238 fl.oz	0.0		
D[illegible]0	371 fl.oz	371 fl.oz	370 fl.oz	0.3		

DryAggs: 22356 lb
Cems: 5300 lb
Waters: 2205 lb
Total: 30342 lb
Wat/Cem: 0.416
Add: 1 G

09:04:28a 07/16/15
Bottles Empty

	Start	End	
AGG	0	0	lb
CEM	0	0	lb

eceived By

ix Inc.
608
112
81125
744

Ticket No. 34252

Moltz Construction
P.O. Box 10
Cody WY 82414

Continental Dam Project
Creede West Hwy 149 past Clear
Creek Mi Mark 48 Left Rd 513

Today 15.00 yd

7.50 yd 15.00 yd 32JN

07/01/15 2 Ken Smith 3.00 in 6.00

50 4500PSI 15.00 0.00 0.00

SubTotal $ 0.00
Tax 0.000 0.00
Total $ 0.00

08:11:37a

Order Total $ 0.00

Ticket No. 34252

Batch size 7.50 yd

-Material-	-Indication-	- AVDP EQU -	- Targets -	-% Tol-	WatFree	%Moist
3\4 AGG	12000 lb	12000 lb	12040 lb	-0.3	-330.0	0.00
SAND	5240 lb	5240 lb	4940 lb	6.1*	450.5	11.59
SAND3	4880 lb	4880 lb	4920 lb	-0.8	404.1	11.21
I-II	4010 lb	4010 lb	3960 lb	1.3*		
FLYASH	1015 lb	1015 lb	990 lb	2.5*		
H20	184 G	184 G	184 G	0.0	1535.5	
MB AE90	49 fl.oz	49 fl.oz	49 fl.oz	0.0		
[illegible]	222 fl.oz	222 fl.oz	222 fl.oz	0.0		
D[illegible]0	348 fl.oz	348 fl.oz	348 fl.oz	0.3		

DryAggs: 21084 lb
Cems: 5025 lb
Waters: 2060 lb
Total: 28680 lb
Wat/Cem: 0.410
Add: 4 G

08:11:37a 07/01/15
Bottles Empty

	Start	End
AGG	0	20 lb
CEM	0	0 lb

Received By [signature]

Center Redi Mix Inc.
P.O. Box 608
1504 W. Hwy 112
Center CO 81125
719-754-2744

Ticket No. 34251

Moltz Constructors Inc.
P.O. Box 1030
Cody WY 82414

Continental Dam Project
Creede West Hwy 149

Today 7.50 yd

07:41:32a 7.50 yd 15.00 yd 3765

07/01/15 1 Ken Smith 3.00 in 6.00

50 4500PSI 7 Sack Class DP Concrete 15.00 0.00 0.00

SubTotal $ 0.00
Tax 0.000 0.00
Total $ 0.00

07:49:04a

Order Total $ 0.00

Ticket No. 34251

Batch size 7.50 yd

-Material-	-Indication-	- AVDP EQU -	- Targets -	-% Tol-	Wat	Free	%Moist
3\4 AGG	12040 lb	12040 lb	12040 lb	0.0	-331.1		0.00
SAND	5260 lb	5260 lb	4920 lb	6.9*	443.1		11.38
SAND3	4880 lb	4880 lb	4920 lb	-0.8	405.6		11.25
I-II	4010 lb	4010 lb	3960 lb	1.3*			
FLYASH	990 lb	990 lb	990 lb	0.0			
H20	184 G	184 G	184 G	0.0	1535.5		
MB AE90	49 fl.oz	49 fl.oz	49 fl.oz	0.0			
[illegible]	222 fl.oz	222 fl.oz	222 fl.oz	0.0			
[illegible]	348 fl.oz	348 fl.oz	347 fl.oz	0.3			

DryAggs: 21149 lb
Cems: 5000 lb
Waters: 2053 lb
Total: 28716 lb
Wat/Cem: 0.411
Add: 4 G

07:49:04a 07/01/15
Bottles Empty

	Start	End
AGG	0	0 lb
CEM	0	0 lb

Received By _____

Grout

Season 1

Western Technologies Inc.
The Quality People
Since 1955

278 Sawyer Drive, No. 2
Durango, CO 81303
(970) 375-9033

SAMPLING / TESTING OF MORTAR CUBES

Client **ROCK SOLID CORPORATION**
195 LODGEPOLE CIRCLE
PARACHUTE, CO 81635

Date of Report **07-14-14**
Job No. **3154JH052**
Event/Invoice No. **31540095-02** Lab No. **0520605-G**
Authorized By **PATRICK BREAGY** Date **06-04-14**
Sampled By **CLIENT** Date **06-05-14**
Submitted By **D. SENJEM** Date **06-18-14**

Client	**ROCK SOLID CORPORATION**
Project	**CONTINENTAL DAM (SLUMGULLION PASS)**
Location	**NORTH OF CREEDE COLORADO**
Source of Sample	**FLOOR ANCHOR, STA:-1+50**
Architect/Engineer	**EDWIN A. TOMS, P.E.**
Contractor	**ROCK SOLID CORPORATION**
Supplier	**QUICKCRETE**

Mortar Type
Required Strength **4000** psi @ **7** days
Penetrometer mm

Time Sampled **UNK**
Ambient Air Temperature °F

MORTAR MIX INFORMATION **QUICKCRETE TYPE III BAGS MIXED TO A THICK CONSISTENCY THAT WILL STILL BE PUMPABLE THROUGH A TREMIE TUBE.**

MORTAR SPECIMENS SAMPLED, MOLDED & CURED IN THE FIELD IN ACCORDANCE WITH: **ASTM C780**

No. of Specimens Molded **3** Nominal Size **2" x 2" x 2"** Cross Sectional Area **4.00** sq. in.

Deviations:

CURED & TESTED IN THE LABORATORY IN ACCORDANCE WITH: **ASTM C780**

Specimen Marking If Any	Date Tested	Age In Days	Time Tested	COMPRESSIVE STRENGTH Maximum Load lbf	lbf per sq.in.	Conformance Indicated?	Type of Fracture & Defects Noted	Tested By
0520605-G	**06-26-14**	**21**	**17:21**	**16286**	**4070**	**YES**	**TYPE 2**	**DS**
0520605-G	**06-27-14**	**22**	**17:37**	**15664**	**3920**	**NO**	**TYPE 2**	**DS**
0520605-G	**07-03-14**	**28**	**20:48**	**17544**	**4390**	**YES**	**TYPE 2**	**DS**

Comments:

Distribution : **ROCK SOLID CORPORATION (1)**

409C©97WTI
052397

THE SERVICES REFERRED TO HEREIN WERE PERFORMED IN ACCORDANCE WITH THE STANDARD OF CARE PRACTICED LOCALLY FOR THE REFERENCED METHOD(S) AND RELATE ONLY TO THE CONDITION(S) OBSERVED OR SAMPLE(S) TESTED AT THE TIME AND PLACE STATED HEREIN. WESTERN TECHNOLOGIES INC. MAKES NO OTHER WARRANTY OR REPRESENTATION EXPRESSED OR IMPLIED, AND HAS NOT CONFIRMED INFORMATION INCLUDING SOURCE OF MATERIALS SUBMITTED BY OTHERS.

REVIEWED BY **F. HAMPTON**
(SIGNED COPY ON FILE)

Western Technologies Inc.
The Quality People
Since 1955

278 Sawyer Drive, No. 2
Durango, CO 81303
(970) 375-9033

SAMPLING / TESTING OF MORTAR CUBES

Client **ROCK SOLID CORPORATION**
195 LODGEPOLE CIRCLE
PARACHUTE, CO 81635

Date of Report **06-23-14**
Job No. **3154JH052**
Event/Invoice No. **31540095-01** Lab No. **0520605-G**
Authorized By **PATRICK BREAGY** Date **06-04-14**
Sampled By **D. SENJEM** Date **06-05-14**
Submitted By **D. SENJEM** Date **06-07-14**

Client	**ROCK SOLID CORPORATION**
Project	**CONTINENTAL DAM (SLUMGULLION PASS)**
Location	**CREEDE, COLORADO**
Source of Sample	**FOUNDATION ANCHORS, STA: 0+64, LEFT SIDE**
Architect/Engineer	**COLORDO P.E. EDWIN A. TOMS**
Contractor	**ROCK SOLID CORPORATION**
Supplier	**ONSITE MIX**

Mortar Type
Required Strength **4000** psi @ **7** days
Penetrometer mm

Time Sampled **1534**
Ambient Air Temperature **69** ˚F

MORTAR MIX INFORMATION **QUICKCRETE TYPE 3 PREMIX**

GROUT TEMPERATURE - 74 DEGREES F.

MORTAR SPECIMENS SAMPLED, MOLDED & CURED IN THE FIELD IN ACCORDANCE WITH: **ASTM C780**

No. of Specimens Molded **6** Nominal Size **2" x 2" x 2"** Cross Sectional Area **4.00** sq. in.

Deviations:

CURED & TESTED IN THE LABORATORY IN ACCORDANCE WITH: **ASTM C780**

Specimen Marking If Any	Date Tested	Age In Days	Time Tested	COMPRESSIVE STRENGTH Maximum Load lbf	lbf per sq.in.	Conformance Indicated?	Type of Fracture & Defects Noted	Tested By
0520605-G	**06-12-14**	**7**	**11:00**	**4538**	**1140**		**TYPE 5**	**JH**
0520605-G	**06-12-14**	**7**	**11:02**	**7054**	**1760**		**TYPE 3**	**JH**
0520605-G	**06-17-14**	**12**	**15:00**	**21120**	**5280**		**TYPE 4**	**FH**
0520605-G	**06-17-14**	**12**	**15:05**	**27397**	**6850**		**TYPE 1**	**FH**
0520605-G	**07-03-14**	**28**						
0520605-G	**07-03-14**	**28**						
	AVERAGE	**7**			**1450**	**NO**		
	AVERAGE	**12**			**6070**	**YES**		

Comments:

Distribution : **ROCK SOLID CORPORATION (1)**

409C©97WTI
052397

THE SERVICES REFERRED TO HEREIN WERE PERFORMED IN ACCORDANCE WITH THE STANDARD OF CARE PRACTICED LOCALLY FOR THE REFERENCED METHOD(S) AND RELATE ONLY TO THE CONDITION(S) OBSERVED OR SAMPLE(S) TESTED AT THE TIME AND PLACE STATED HEREIN. WESTERN TECHNOLOGIES INC. MAKES NO OTHER WARRANTY OR REPRESENTATION EXPRESSED OR IMPLIED, AND HAS NOT CONFIRMED INFORMATION INCLUDING SOURCE OF MATERIALS SUBMITTED BY OTHERS.

REVIEWED BY **F. HAMPTON**
(SIGNED COPY ON FILE)

Western Technologies Inc.
The Quality People
Since 1955

278 Sawyer Drive, No. 2
Durango, CO 81303
(970) 375-9033

SAMPLING / TESTING OF MORTAR CUBES

Client **ROCK SOLID CORPORATION**
195 LODGEPOLE CIRCLE
PARACHUTE, CO 81635

Date of Report **07-14-14**
Job No. **3154JH052**
Event/Invoice No. **31540095-03** Lab No. **0520606-G**
Authorized By **PATRICK BREAGY** Date **06-05-14**
Sampled By **CLIENT** Date **06-06-14**
Submitted By **D. SENJEM** Date **06-18-14**

Client	**ROCK SOLID CORPORATION**
Project	**CONTINENTAL DAM (SLUMGULLION PASS)**
Location	**NORTH OF CREEDE COLORADO**
Source of Sample	**FLOOR ANCHOR, STA: -1+25**
Architect/Engineer	**EDWIN A. TOMS, P.E.**
Contractor	**ROCK SOLID CORPORATION**
Supplier	**QUICKCRETE**

Mortar Type
Required Strength **4000** psi @ **7** days
Penetrometer mm

Time Sampled **UNK**
Ambient Air Temperature °F

MORTAR MIX INFORMATION **QUICKCRETE TYPE III MIXED TO A THICK CONSISTENCY THAT IS STILL PUMPABLE THROUGH A TREMIE TUBE.**

MORTAR SPECIMENS SAMPLED, MOLDED & CURED IN THE FIELD IN ACCORDANCE WITH: **ASTM C780**

No. of Specimens Molded **3** Nominal Size **2" x 2" x 2"** Cross Sectional Area **4.00** sq. in.

Deviations:

CURED & TESTED IN THE LABORATORY IN ACCORDANCE WITH: **ASTM C780**

Specimen Marking If Any	Date Tested	Age In Days	Time Tested	COMPRESSIVE STRENGTH Maximum Load lbf	lbf per sq.in.	Conformance Indicated?	Type of Fracture & Defects Noted	Tested By
0520606-G	**06-26-14**	**20**	**17:13**	**12426**	**3110**	**NO**	**TYPE 5**	**DS**
0520606-G	**06-27-14**	**21**	**17:42**	**9090**	**2270**	**NO**	**TYPE 3**	**DS**
0520606-G	**07-03-14**	**27**	**20:53**	**13175**	**3290**	**NO**	**TYPE 2**	**DS**

Comments:

Distribution : **ROCK SOLID CORPORATION (1)**

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THE SERVICES REFERRED TO HEREIN WERE PERFORMED IN ACCORDANCE WITH THE STANDARD OF CARE PRACTICED LOCALLY FOR THE REFERENCED METHOD(S) AND RELATE ONLY TO THE CONDITION(S) OBSERVED OR SAMPLE(S) TESTED AT THE TIME AND PLACE STATED HEREIN. WESTERN TECHNOLOGIES INC. MAKES NO OTHER WARRANTY OR REPRESENTATION EXPRESSED OR IMPLIED, AND HAS NOT CONFIRMED INFORMATION INCLUDING SOURCE OF MATERIALS SUBMITTED BY OTHERS.

REVIEWED BY **F. HAMPTON**
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The Quality People
Since 1955

278 Sawyer Drive, No. 2
Durango, CO 81303
(970) 375-9033

SAMPLING / TESTING OF MORTAR CUBES

Client **ROCK SOLID CORPORATION**
195 LODGEPOLE CIRCLE
PARACHUTE, CO 81635

Date of Report **07-14-14**
Job No. **3154JH052**
Event/Invoice No. **31540095-04** Lab No. **0520611-G**
Authorized By **PATRICK BREAGY** Date **06-10-14**
Sampled By **CLIENT** Date **06-11-14**
Submitted By **D. SENJEM** Date **06-18-14**

Client	**ROCK SOLID CORPORATION**
Project	**CONTINENTAL DAM (SLUMGULLION PASS)**
Location	**NORTH OF CREEDE COLORADO**
Source of Sample	**WALL ANCHOR, STA: 0+25 RT**
Architect/Engineer	**EDWIN A. TOMS, P.E.**
Contractor	**ROCK SOLID CORPORATION**
Supplier	**PORTLAND TYPE III**

Mortar Type
Required Strength **5000** psi @ **28** days
Penetrometer mm

Time Sampled **UK**
Ambient Air Temperature °F

MORTAR MIX INFORMATION **QUICKCRETE TYPE III BAGS MIXED TO A THICK CONSISTENCY THAT IS STILL PUMPABLE THROUGH A TREMIE TUBE.**

MORTAR SPECIMENS SAMPLED, MOLDED & CURED IN THE FIELD IN ACCORDANCE WITH: **ASTM C780**

No. of Specimens Molded **3** Nominal Size **2" x 2" x 2"** Cross Sectional Area **4.00** sq. in.

Deviations:

CURED & TESTED IN THE LABORATORY IN ACCORDANCE WITH: **ASTM C780**

Specimen Marking If Any	Date Tested	Age In Days	Time Tested	COMPRESSIVE STRENGTH Maximum Load lbf	COMPRESSIVE STRENGTH Maximum Load lbf per sq.in.	Conformance Indicated?	Type of Fracture & Defects Noted	Tested By
0520611-G	**06-26-14**	**15**	**17:04**	**10037**	**2510**		**TYPE 2**	**DS**
0520611-G	**06-27-14**	**16**	**17:54**	**9740**	**2440**		**TYPE 3**	**DS**
0520611-G	**07-09-14**	**28**	**15:10**	**17827**	**4460**	**NO**	**TYPE 1**	**FH**

Comments:

Distribution : **ROCK SOLID CORPORATION (1)**

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SAMPLING / TESTING OF MORTAR CUBES

Client **ROCK SOLID CORPORATION**
195 LODGEPOLE CIRCLE
PARACHUTE, CO 81635

Date of Report **07-14-14**
Job No. **3154JH052**
Event/Invoice No. **31540095-05** Lab No. **0520612-G**
Authorized By **PATRICK BREAGY** Date **06-11-14**
Sampled By **CLIENT** Date **06-12-14**
Submitted By **D. SENJEM** Date **06-18-14**

Client	**ROCK SOLID CORPORATION**
Project	**CONTINENTAL DAM (SLUMGULLION PASS)**
Location	**NORTH OF CREEDE COLORADO**
Source of Sample	**WALL ANCHOR, STA: 0+12 LT**
Architect/Engineer	**EDWIN A. TOMS, P.E.**
Contractor	**ROCK SOLID CORPORATION**
Supplier	**QUICKCRETE**

Mortar Type
Required Strength **5000** psi @ **28** days
Penetrometer mm

Time Sampled **UNK**
Ambient Air Temperature °F

MORTAR MIX INFORMATION **QUICKCRETE TYPE III BAGS MIXED TO A THICK CONSISTENCY THAT IS STILL PUMPABLE THROUGH A TREMIE TUBE**

MORTAR SPECIMENS SAMPLED, MOLDED & CURED IN THE FIELD IN ACCORDANCE WITH: **ASTM C780**

No. of Specimens Molded **3** Nominal Size **2" x 2" x 2"** Cross Sectional Area **4.00** sq. in.

Deviations:

CURED & TESTED IN THE LABORATORY IN ACCORDANCE WITH: **ASTM C780**

Specimen Marking If Any	Date Tested	Age In Days	Time Tested	COMPRESSIVE STRENGTH Maximum Load lbf	lbf per sq.in.	Conformance Indicated?	Type of Fracture & Defects Noted	Tested By
0520612-G	**06-26-14**	**14**	**17:31**	**14504**	**3630**		**TYPE 4**	**DS**
0520612-G	**06-27-14**	**15**	**18:00**	**16158**	**4040**		**TYPE 3**	**DS**
0520612-G	**07-10-14**	**28**	**11:00**	**19316**	**4830**	**NO**	**TYPE 3**	**FW**

Comments:

Distribution : **ROCK SOLID CORPORATION (1)**

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SAMPLING / TESTING OF MORTAR CUBES

Client **ROCK SOLID CORPORATION**
195 LODGEPOLE CIRCLE
PARACHUTE, CO 81635

Date of Report **07-15-14**
Job No. **3154JH052**
Event/Invoice No. **31540095-06** Lab No. **0520617-G**
Authorized By **PATRICK BREAGY** Date **06-17-14**
Sampled By **CLIENT** Date **06-17-14**
Submitted By **D. SENJEM** Date **06-18-14**

Client	**ROCK SOLID CORPORATION**
Project	**CONTINENTAL DAM (SLUMGULLION PASS)**
Location	**NORTH OF CREEDE COLORADO**
Source of Sample	**FLOOR ANCHOR, STA: 0+30**
Architect/Engineer	**EDWIN A. TOMS, P.E.**
Contractor	**ROCK SOLID CORPORATION**
Supplier	**QUICKCRETE**

Mortar Type
Required Strength **4000** psi @ **7** days
Penetrometer mm

Time Sampled **UNK**
Ambient Air Temperature °F

MORTAR MIX INFORMATION **QUICKCRETE TYPE III BAGS MIXED TO A THICK CONSISTANCY THAT IS STILL PUMPABLE THROUGH A TREMIE TUBE.**

MORTAR SPECIMENS SAMPLED, MOLDED & CURED IN THE FIELD IN ACCORDANCE WITH: **ASTM C780**

No. of Specimens Molded **3** Nominal Size **2" x 2" x 2"** Cross Sectional Area **4.00** sq. in.

Deviations:

CURED & TESTED IN THE LABORATORY IN ACCORDANCE WITH: **ASTM C780**

Specimen Marking If Any	Date Tested	Age In Days	Time Tested	COMPRESSIVE STRENGTH Maximum Load lbf	lbf per sq.in.	Conformance Indicated?	Type of Fracture & Defects Noted	Tested By
0520617-G	**06-26-14**	**9**	**16:47**	**9542**	**2390**	**NO**	**TYPE 3**	**DS**
0520617-G	**06-27-14**	**10**	**18:06**	**10518**	**2630**	**NO**	**TYPE 4**	**DS**
0520617-G	**07-15-14**	**28**	**14:23**	**13854**	**3460**	**NO**	**TYPE 3**	**MW**

Comments:

Distribution : **ROCK SOLID CORPORATION (1)**

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SAMPLING / TESTING OF MORTAR CUBES

Client **ROCK SOLID CORPORATION**
195 LODGEPOLE CIRCLE
PARACHUTE, CO 81635

Date of Report **07-22-14**
Job No. **3154JH052**
Event/Invoice No. **31540095-07** Lab No. **0520618-1**
Authorized By **PATRICK BREAGY** Date **06-18-14**
Sampled By **D. SENJEM** Date **06-18-14**
Submitted By **D. SENJEM** Date **06-19-14**

Client	**ROCK SOLID CORPORATION**
Project	**CONTINENTAL DAM (SLUMGULLION PASS)**
Location	**NORTH OF CREEDE COLORADO**
Source of Sample	**WALL ANCHOR, STA: 0+74.50**
Architect/Engineer	**EDWIN A. TOMS, P.E.**
Contractor	**ROCK SOLID CORPORATION**
Supplier	**PORTLAND TYPE 3**

Mortar Type
Required Strength **5000** psi @ **28** days
Penetrometer mm

Time Sampled **1147**
Ambient Air Temperature **50** °F

MORTAR MIX INFORMATION **QUICKCRETE TYPE THREE BAGS MIXED TO A THICK CONSISTANCY THAT IS STILL PUMPABLE THROUGH A TREMIE TUBE.**

MORTAR SPECIMENS SAMPLED, MOLDED & CURED IN THE FIELD IN ACCORDANCE WITH: **ASTM C780**

No. of Specimens Molded **6** Nominal Size **2" x 2" x 2"** Cross Sectional Area **4.00** sq. in.

Deviations:

CURED & TESTED IN THE LABORATORY IN ACCORDANCE WITH: **ASTM C780**

Specimen Marking If Any	Date Tested	Age In Days	Time Tested	COMPRESSIVE STRENGTH Maximum Load lbf	lbf per sq.in.	Conformance Indicated?	Type of Fracture & Defects Noted	Tested By
0520618-1	**06-26-14**	**8**	**18:44**	**11083**	**2770**		**TYPE 3**	**DS**
0520618-1	**07-02-14**	**14**	**13:04**	**14193**	**3550**		**TYPE 3**	**GT**
0520618-1	**07-16-14**	**28**	**19:30**	**18830**	**4710**		**TYPE 1**	**DS**
0520618-1	**07-16-14**	**28**		**16590**	**4150**		**BROKE AT FARMINGTON OFFIC**	**BJ**
0520618-1		**HOLD**						
0520618-1		**HOLD**						
	AVERAGE	**28**			**4430**	**NO**		

Comments:

Distribution : **ROCK SOLID CORPORATION (1)**

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SAMPLING / TESTING OF HYDRAULIC CEMENT GROUT (NONSHRINK)

Client **ROCK SOLID CORPORATION**
195 LODGEPOLE CIRCLE
PARACHUTE, CO 81635

Date of Report **07-15-14**
Job No. **3154JH052**
Event/Invoice No. **31540119-01** Lab No. **0520708-G**
Authorized By **PATRICK BREAGY** Date **07-08-14**
Sampled By **CLIENT** Date **07-08-14**
Submitted By **D. SENJEM** Date **07-11-14**

Client	**ROCK SOLID CORPORATION**
Project	**CONTINENTAL DAM (SLUMGULLION PASS)**
Location	**NORTH OF CREEDE COLORADO**
Source of Sample	**FLOOR ANCHOR, STA: 1+50 AT CL**
Architect/Engineer	**EDWIN A. TOMS, P.E.**
Contractor	**ROCK SOLID CORPORATION**
Supplier	**QUICKCRETE**

Grade **C**
Required Strength **4000** psi @ **7** days

Time Sampled **UNK**
Ambient Air Temperature °F

GROUT MIX INFORMATION **QUICKCRETE TYPE III BAGS MIXED TO A THICK CONSISTENCY THAT IS STILL PUMPABLE THROUGH A TREMIE TUBE.**

GROUT SPECIMENS SAMPLED, MOLDED & CURED IN THE FIELD IN ACCORDANCE WITH APPLICABLE PORTIONS OF **ASTM C1107**

No. of Specimens Molded **3** Nominal Size **2" x 2" x 2"** Cross Sectional Area **4.00** sq. in.

Deviations:

CURED & TESTED IN THE LABORATORY IN ACCORDANCE WITH **ASTM C109/109M**

Specimen Marking If Any	Date Tested	Age In Days	Time Tested	COMPRESSIVE STRENGTH Maximum Load lbf	Maximum Load lbf per sq.in.	Conformance Indicated?	Type of Fracture & Defects Noted	Tested By
0520708-G	**07-11-14**	**3**	**17:27**	**9740**	**2440**		**TYPE 5**	**DS**
0520708-G	**07-15-14**	**7**	**14:20**	**12002**	**3000**	**NO**	**TYPE 3**	**MW**
0520708-G	**08-05-14**	**28**						

Comments:

Distribution : **ROCK SOLID CORPORATION (1)**

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Durango, CO 81303
(970) 375-9033

SAMPLING / TESTING OF MORTAR CUBES

Client **ROCK SOLID CORPORATION**
195 LODGEPOLE CIRCLE
PARACHUTE, CO 81635

Date of Report **08-07-14**
Job No. **3154JH052**
Event/Invoice No. **31540119-02** Lab No. **0520709-G**
Authorized By **PATRICK BREAGY** Date **07-09-14**
Sampled By **CLIENT** Date **07-09-14**
Submitted By **D. SENJEM** Date **07-11-14**

Client	**ROCK SOLID CORPORATION**
Project	**CONTINENTAL DAM (SLUMGULLION PASS)**
Location	**NORTH OF CREEDE COLORADO**
Source of Sample	**FLOOR ANCHOR, STA: 2+30 @ CL**
Architect/Engineer	**EDWIN A. TOMS, P.E.**
Contractor	**ROCK SOLID CORPORATION**
Supplier	**QUICKCRETE**

Mortar Type
Required Strength **4000** psi @ **7** days
Penetrometer mm

Time Sampled **UNK**
Ambient Air Temperature °F

MORTAR MIX INFORMATION **QUICKCRETE TYPE III BAGS MIXED TO A THICK CONSISTENCY THAT IS STILL PUMPABLE THROUGH A TREMIE TUBE.**

MORTAR SPECIMENS SAMPLED, MOLDED & CURED IN THE FIELD IN ACCORDANCE WITH: **ASTM C780**

No. of Specimens Molded **3** Nominal Size **2" x 2" x 2"** Cross Sectional Area **4.00** sq. in.

Deviations:

CURED & TESTED IN THE LABORATORY IN ACCORDANCE WITH: **ASTM C780**

Specimen Marking If Any	Date Tested	Age In Days	Time Tested	COMPRESSIVE STRENGTH Maximum Load lbf	COMPRESSIVE STRENGTH Maximum Load lbf per sq.in.	Conformance Indicated?	Type of Fracture & Defects Noted	Tested By
0520709-G	**07-14-14**	**5**	**10:36**	**12723**	**3180**			**MW**
0520709-G	**07-16-14**	**7**	**19:25**	**14773**	**3690**	**NO**	**TYPE 5**	**DS**
0520709-G	**08-06-14**	**28**	**12:03**	**20187**	**5050**	**YES**	**TYPE 3**	**GT**

Comments:

Distribution : **ROCK SOLID CORPORATION (1)**

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REVIEWED BY **F. HAMPTON**
(SIGNED COPY ON FILE)

To:	Moltz Constructors	July 25, 2014
Attention:	Thomas Moltz PO Box 130 Cody, WY 82414	
Project:	Continental Dam Rehabilitation Project	

RE: Rock Solid Solutions- Grout Strength Reports for Drilled Anchors and Wall Anchors

Mr. Moltz,

The purpose of this letter is to address the grout strength reports that have identified strengths below the requirements of the project. The grout tests were performed by Western Technologies in Durango Colorado. Rock Solid had three (3) deliveries of Quickcrete brand type III Portland cement product supplied by White Cap in Grand Junction Colorado to the project. The water source provided by Moltz Construction to Rock Solid Solutions was water from the Continental Reservoir. The water was taken from both the actual reservoir surface above the dam and from the base area below the outlet works.

Rock Solid has used this type of Portland cement for many years and achieved greater strengths than what has been identified in the Western Technologies reports. Rock Solid requested Western Technologies to investigate the cause of the lower strength grout cubes based upon the results of the short term tests. Initial strength tests (6/5/14) conducted on samples taken from mixtures from the reservoir surface water near the crest of the dam were more like what RSS would anticipate the test results should be. However, later samples taken on mixtures prepared from the reservoir surface and base area are significantly lower.

Strength vs time curves almost indicate that the initial samples have the history of Type III mix, however, later samples show a flatter curve and appear to behave more like a Type I/II mixture. Also, could it be that that the temperature of the water source provided to Rock Solid's crew impacted the curing process of the grout. It is our belief that the water source is either too cold when applied to the grout affecting the heat of hydration, and/or the water

195 Lodgepole Circle, Parachute, CO 81635
Office: (970) 987-4247 Fax: (970) 712-5715

source has too much salinity, bacteria or algae, or it is a combination of both. In addition, the curing temperature of the samples was very low (30's) as well, unlike the temperature of the grout installed in the anchors and micropiles (50's).

Rock Solid recommends performing additional field pull tests on the drilled anchors to ensure the required strengths are achieved. As for the wall anchors, additional testing may not be necessary as the wall anchors are being utilized for temporary purposes. Rock Solid will be conducting field tests of the micropiles during the week of July 28th, therefore additional field pull tests could be performed at that time to reassure the Engineer that the grout strength obtained will still meet the design pull-out requirements for the project.

Please let us know how you would like to proceed after you have had a chance to discuss with the project engineer.

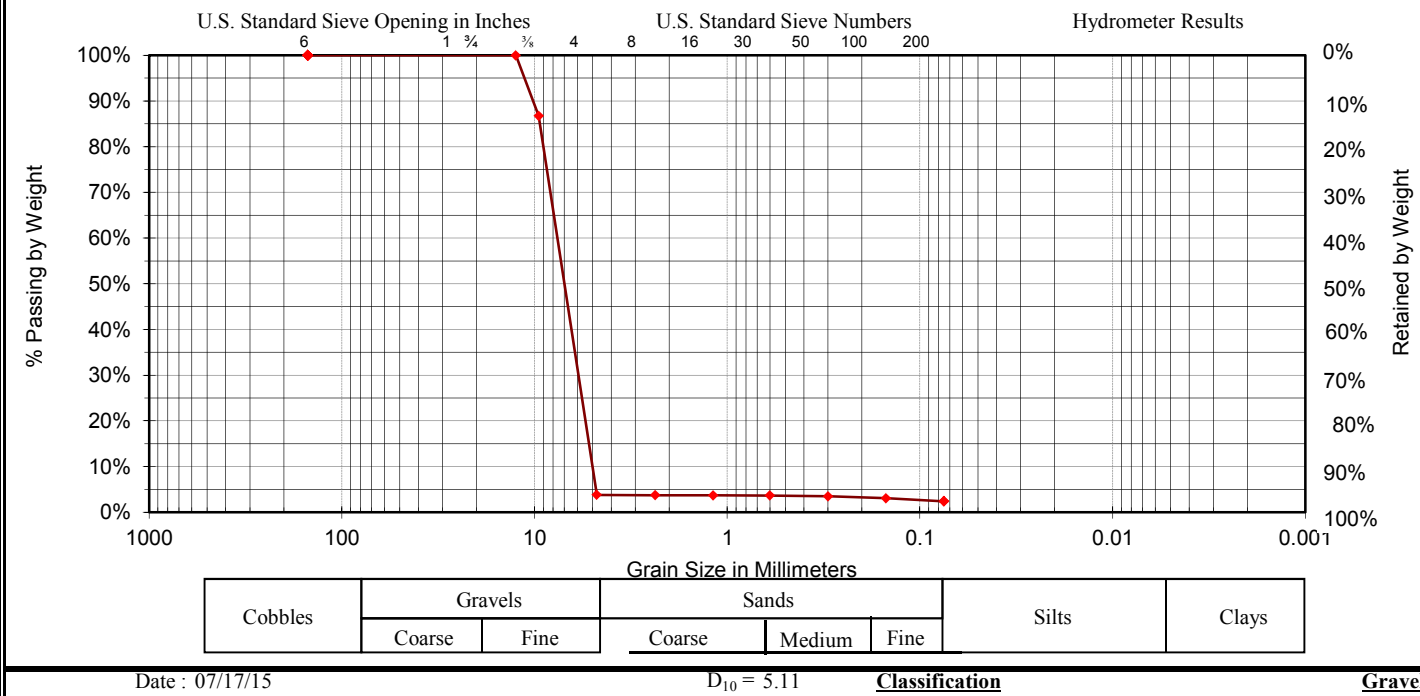
Respectfully,



Patrick Breagy
Project Manager
Rock Solid Solutions
(970) 903-3028
pbreagy@rocksolidblasting.com

Drain Gravel

Gradation Test Results
ASTM C136



Date :	07/17/15	D_{10} = 5.11	**Classification**	**Gravel**
Sample #:	1	D_{30} = 6.25	GP, Poorly graded Gravel	96.2%
Sample Use:	Drain Gravel	D_{60} = 7.97	**AASHTO Classification**	**Sand**
Source:	USFS Pit	C_C = 0.96	N/A	1.4%
Client:	Moltz Constructors, Inc.	$C_{U=}$ 1.56	**Atterberg Classification**	**Silt & Clay**
Project Location:	Hinsdale County, CO	Liquid Limit= N/A	N/A	2.4%
Boring #:	N/A	Plastic Limit= N/A	**Water Soluble Sulfates**	**Moisture Content**
Depth:	N/A	Plasticity Index= N/A	N/A	6.8%

Coarse Section Sieve Size US	Metric	Actual Cumulative Percent Passing	Interpolated Cumulative Percent Passing	Specs Max	Specs Min	**Fines Section** Sieve Size US	Metric	Actual Cumulative Percent Passing	Interpolated Cumulative Percent Passing	Specs Max	Specs Min
6.00"	150.00		100.0%			#4	4.750	**4%**	4%	30.0%	0.0%
4.00"	100.00		100.0%			#8	2.360	4%	4%	10.0%	0.0%
3.00"	75.00		100.0%			#10	2.000		4%		
2.50"	63.00		100.0%			#16	1.180	4%	4%	5.0%	0.0%
2.00"	50.00		100.0%			#20	0.850		4%		
1.75"	45.00		100.0%			#30	0.600	4%	4%		
1.50"	37.50		100.0%			#40	0.425		4%		
1.25"	31.50		100.0%			#50	0.300	3%	3%	3.0%	0.0%
1.00"	25.00		100.0%			#60	0.250		3%		
7/8"	22.40		100.0%			#80	0.180		3%		
3/4"	19.00		100.0%			#100	0.150	3%	3%		
5/8"	16.00		100.0%			#140	0.106		3%		
1/2"	12.50	100%	100.0%		100.0%	#170	0.090		3%		
3/8"	9.50	87%	87%	100.0%	30.0%	#200	0.075	2.4%	2.4%		
1/4"	6.30		31%			#270	0.053				
#4	4.75	4%	4%	30.0%	0.0%						

Project Name: Continental Dam Rehabilitation	Project Number: 15096	Figure: G-1

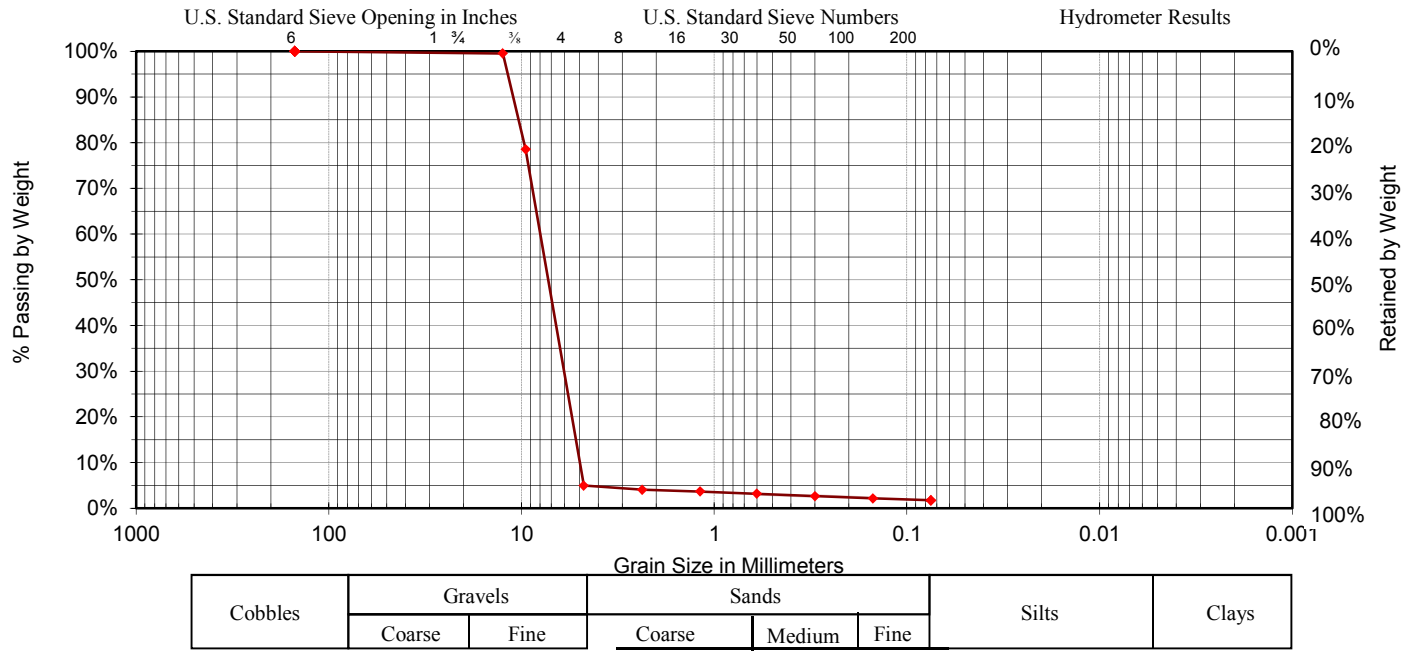
Sample Meets Revised Drain Gravel Gradation Specification

1537 G Street
Salida, CO 81201
(719)539-2312
Fax(719)530-9111

MOUNTAIN ENGINEERING & TESTING

2035 1/2 Grande Avenue
Monte Vista, CO 81144
(719)628-2069

Gradation Test Results
ASTM C136



Date :	08/06/15	D_{10} =	5.07	**Classification**	**Gravel**
Sample #:	8	D_{30} =	6.37	GP, Poorly graded Gravel	95.0%
Sample Use:	Drain Gravel	D_{60} =	8.30	**AASHTO Classification**	**Sand**
Source:	Toe Drain	C_C =	0.96	N/A	3.2%
Client:	Moltz Constructors, Inc.	$C_{U=}$	1.64	**Atterberg Classification**	**Silt & Clay**
Project Location:	Hinsdale County, CO	Liquid Limit=	N/A	N/A	1.7%
Boring #:	N/A	Plastic Limit=	N/A	**Water Soluble Sulfates**	**Moisture Content**
Depth:	N/A	Plasticity Index=	N/A	N/A	5.1%

Coarse Section Sieve Size US	Metric	Actual Cumulative Percent Passing	Interpolated Cumulative Percent Passing	Specs Max	Specs Min	**Fines Section** Sieve Size US	Metric	Actual Cumulative Percent Passing	Interpolated Cumulative Percent Passing	Specs Max	Specs Min
6.00"	150.00		100.0%			#4	4.750	5%	5%		
4.00"	100.00		100.0%			#8	2.360	4%	4%	10.0%	0.0%
3.00"	75.00		100.0%			#10	2.000		4%		
2.50"	63.00		100.0%			#16	1.180	4%	4%	5.0%	0.0%
2.00"	50.00		100.0%			#20	0.850		3%		
1.75"	45.00		100.0%			#30	0.600	3%	3%		
1.50"	37.50		100.0%			#40	0.425		3%		
1.25"	31.50		100.0%			#50	0.300	3%	3%	3.0%	0.0%
1.00"	25.00		100.0%			#60	0.250		2%		
7/8"	22.40		100.0%			#80	0.180		2%		
3/4"	19.00		100.0%			#100	0.150	2%	2%		
5/8"	16.00		100.0%			#140	0.106		2%		
1/2"	12.50	100%	99.5%		100.0%	#170	0.090		2%		
3/8"	9.50	79%	79%	100.0%	30.0%	#200	0.075	1.7%	1.7%		
1/4"	6.30		29%			#270	0.053				
#4	4.75	5%	5%	30.0%	0.0%						

Project Name: Continental Dam Rehabilitation	Project Number: 15096	Figure: G-7

Sample Meets Revised Drain Gravel Gradation Specification

1537 G Street
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Fax(719)530-9111

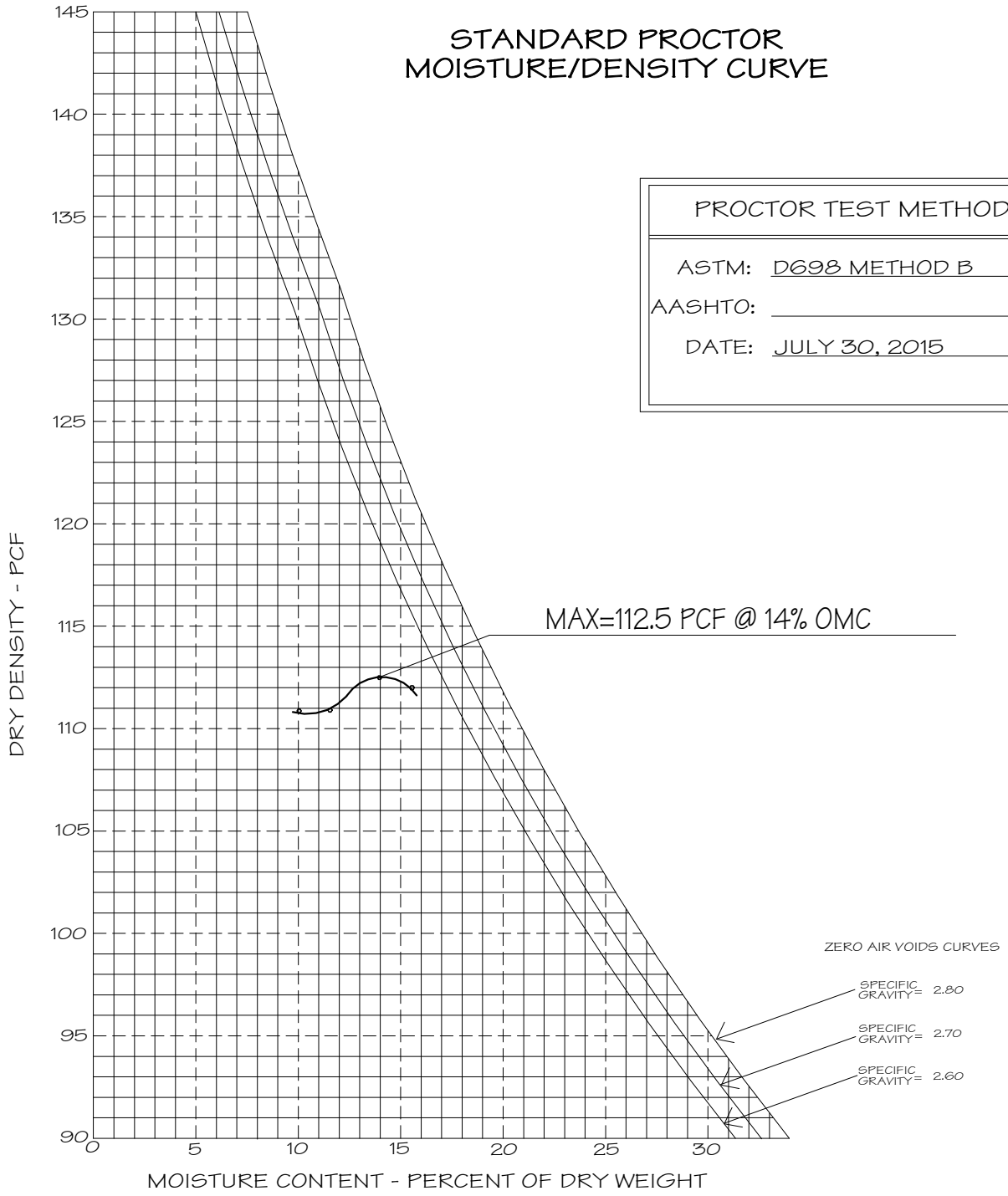
MOUNTAIN ENGINEERING & TESTING

2035 1/2 Grande Avenue
Monte Vista, CO 81144
(719)628-2069

Filter Sand

STANDARD PROCTOR MOISTURE/DENSITY CURVE

PROCTOR TEST METHOD	
ASTM:	D698 METHOD B
AASHTO:	
DATE:	JULY 30, 2015



SAMPLE NUMBER: 2	GRAVEL(%): N/A	LIQUID LIMIT: N/A
SAMPLE USE: FILTER SAND	SAND(%): N/A	PLASTICITY INDEX: N/A
MATERIAL TYPE: USFS PIT FILTER SAND	SILT & CLAY(%): N/A	

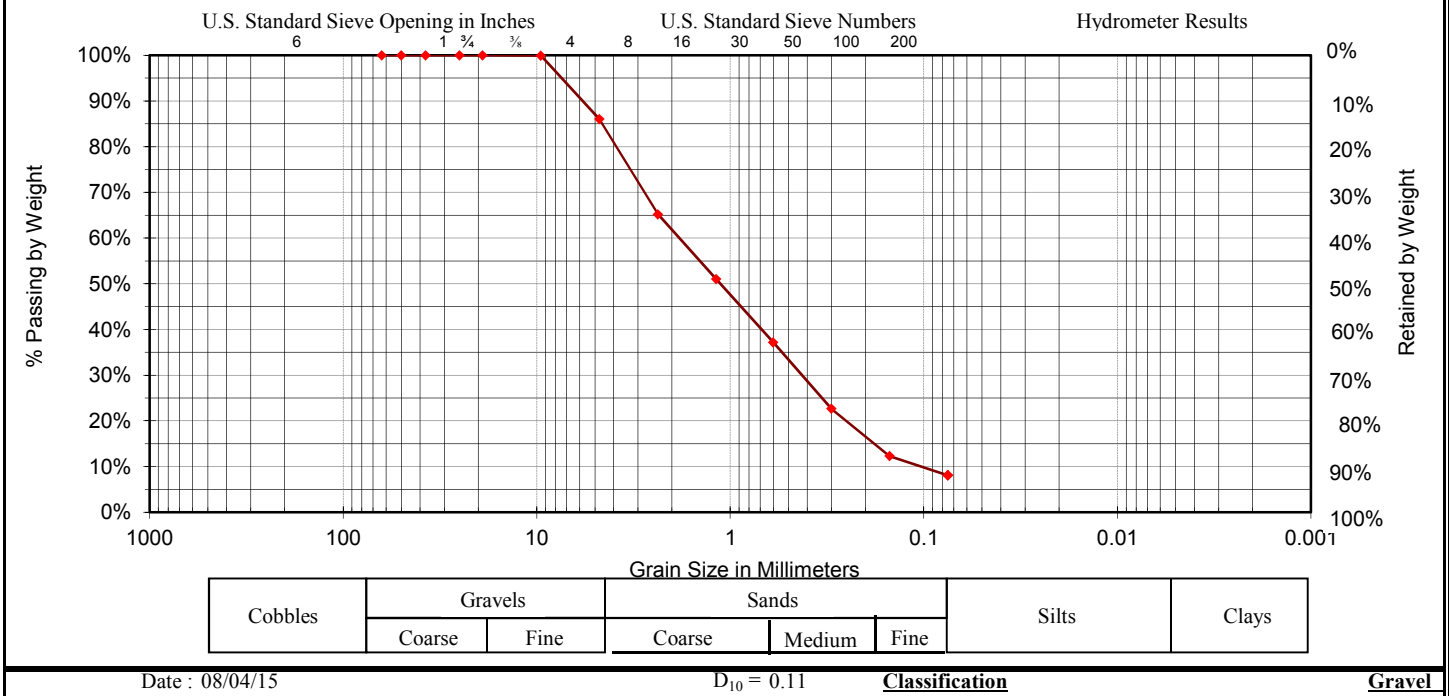
CLIENT: MOLTZ CONSTRUCTORS PROJECT: CONTINENTAL DAM	LOCATION: HINSDALE COUNTY, CO	PROJECT NUMBER: 15096	FIGURE: P-1

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MOUNTAIN ENGINEERING & TESTING

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Gradation Test Results
ASTM C136



Date :	08/04/15	D_{10} =	0.11	**Classification**	**Gravel**
Sample #:	7	D_{30} =	0.45	SP-SM, Poorly graded Sand with Silt	14.0%
Sample Use:	Compacted Filter Sand	D_{60} =	1.93	**AASHTO Classification**	**Sand**
Source:	Test Strip	C_C =	0.97	N/A	78.0%
Client:	Moltz Constructors, Inc.	$C_{U=}$	17.60	**Atterberg Classification**	**Silt & Clay**
Project Location:	Hinsdale County, CO	Liquid Limit=	NV	NP = Non Plastic	8.1%
Boring #:	N/A	Plastic Limit=	NP	**Water Soluble Sulfates**	**Moisture Content**
Depth:	N/A	Plasticity Index=	NP	N/A	9.0%

Coarse Section						**Fines Section**					
Sieve Size		Cumulative Percent	Cumulative Percent	Specs	Specs	Sieve Size		Cumulative Percent	Cumulative Percent	Specs	Specs
US (in.)	Metric (mm)	Retained	Passing	Max	Min	US (in.)	Metric (mm)	Retained	Passing	Max	Min
6.00"	150.00		100%			#8	2.360	35%	65%	80%	45%
4.00"	100.00		100%			#16	1.180	49%	51%	65%	27%
3.00"	75.00		100%			#30	0.600	63%	37%	50%	12%
2.50"	63.00		100%			#50	0.300	77%	23%	30%	5%
2.00"	50.00		100%			#100	0.150	88%	12%	15%	0%
1.50"	37.50		100%			#200	0.075	91.9%	8.1%	10%	0%
1.00"	25.00		100%								
3/4"	19.00	0%	100%								
3/8"	9.50	0%	100%		100%						
#4	4.75	14%	86%	100%	70%						

Project Name: Continental Dam	Project Number: 15096	Figure: G-6

Sample Meets Revised Filter Sand Gradation Specification

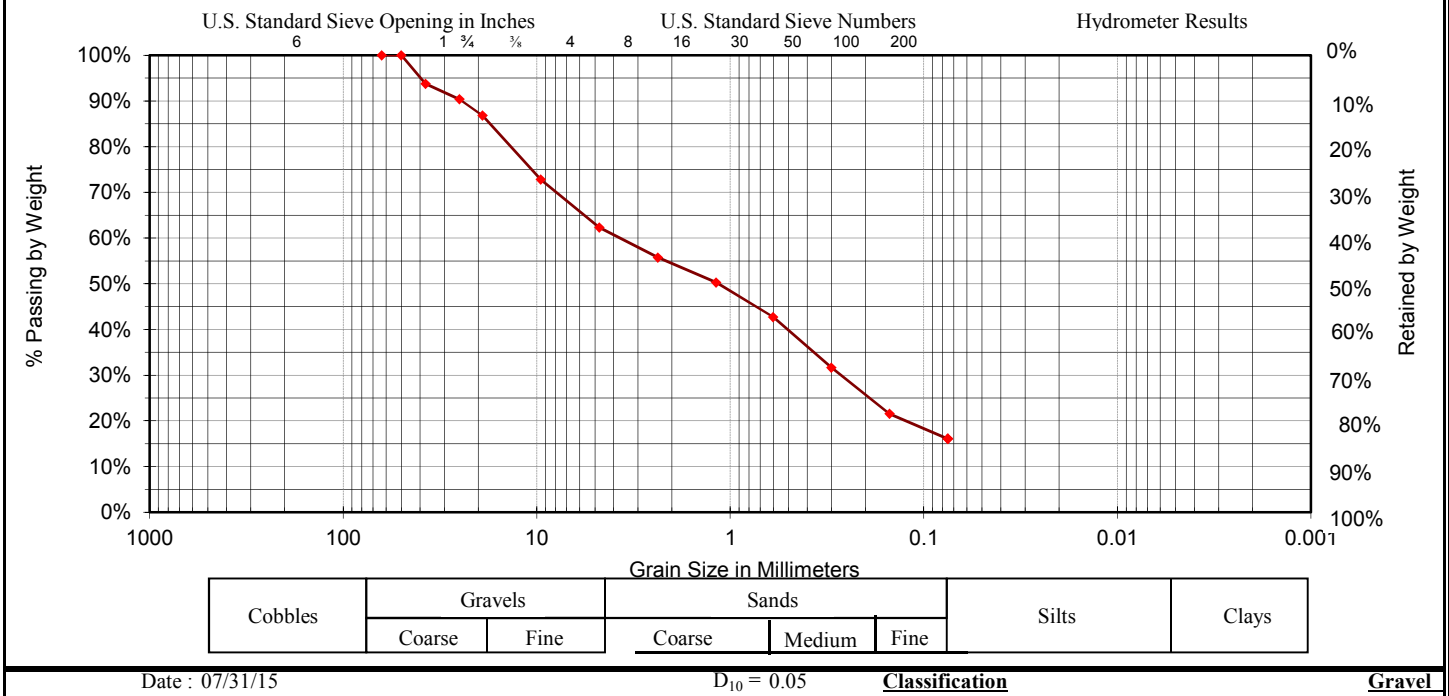
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MOUNTAIN ENGINEERING & TESTING

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Common Fill

Gradation Test Results
ASTM C136



Date :	07/31/15	D_{10} = 0.05	**Classification**	**Gravel**
Sample #:	3	D_{30} = 0.28	SM, Silty Sand with Gravel	37.7%
Sample Use:	Common Fill	D_{60} = 3.91	**AASHTO Classification**	**Sand**
Source:	NE Side of Stockpile	C_C = 0.42	N/A	46.3%
Client:	Moltz Constructors, Inc.	C_U = 83.69	**Atterberg Classification**	**Silt & Clay**
Project Location:	Hinsdale County, CO	Liquid Limit= NV	NP = Non Plastic	16.1%
Boring #:	N/A	Plastic Limit= NP	**Water Soluble Sulfates**	**Moisture Content**
Depth:	N/A	Plasticity Index= NP	N/A	12.3%

Coarse Section						**Fines Section**					
Sieve Size		Cumulative Percent	Cumulative Percent	Specs	Specs	Sieve Size		Cumulative Percent	Cumulative Percent	Specs	Specs
US (in.)	Metric (mm)	Retained	Passing	Max	Min	US (in.)	Metric (mm)	Retained	Passing	Max	Min
6.00"	150.00		100%			#8	2.360	44%	56%		
4.00"	100.00		100%			#16	1.180	50%	50%		
3.00"	75.00		100%		100%	#30	0.600	57%	43%		
2.50"	63.00		100%			#50	0.300	68%	32%		
2.00"	50.00	0%	100%			#100	0.150	78%	22%		
1.50"	37.50	6%	94%			#200	0.075	83.9%	16.1%	20%	
1.00"	25.00	10%	90%								
3/4"	19.00	13%	87%								
3/8"	9.50	27%	73%								
#4	4.75	38%	62%								

Project Name: Continental Dam | Project Number: 15096 | Figure: G-2

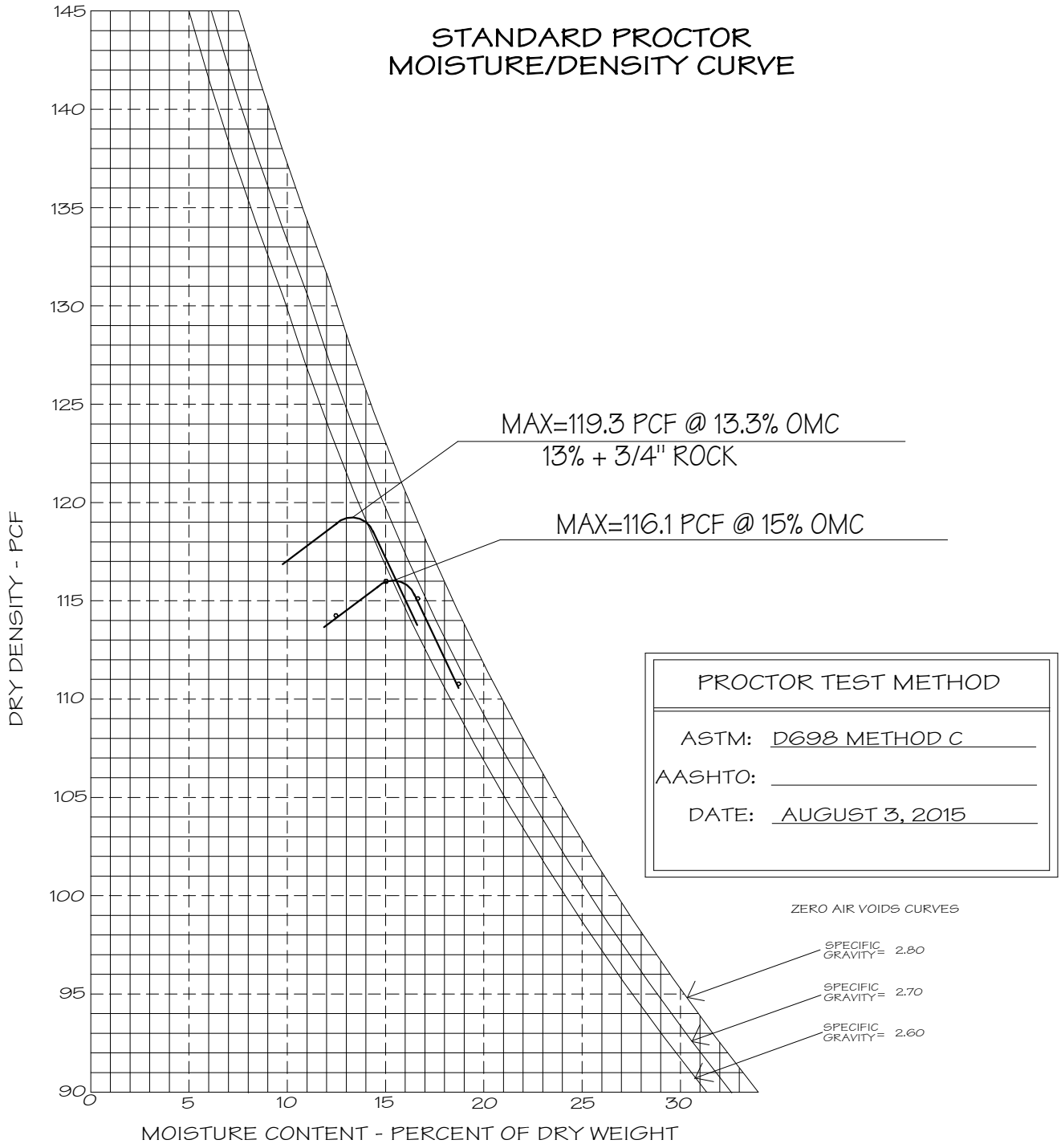
Sample Meets Revised Common Fill Gradation Specification

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MOUNTAIN ENGINEERING & TESTING

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STANDARD PROCTOR MOISTURE/DENSITY CURVE



PROCTOR TEST METHOD	
ASTM:	D698 METHOD C
AASHTO:	
DATE:	AUGUST 3, 2015

SAMPLE NUMBER: 3	GRAVEL(%): 37.7	LIQUID LIMIT: NV
SAMPLE USE: COMMON FILL	SAND(%): 46.3	PLASTICITY INDEX: NP
MATERIAL TYPE: NE SIDE OF STOCKPILE	SILT & CLAY(%): 16.1	

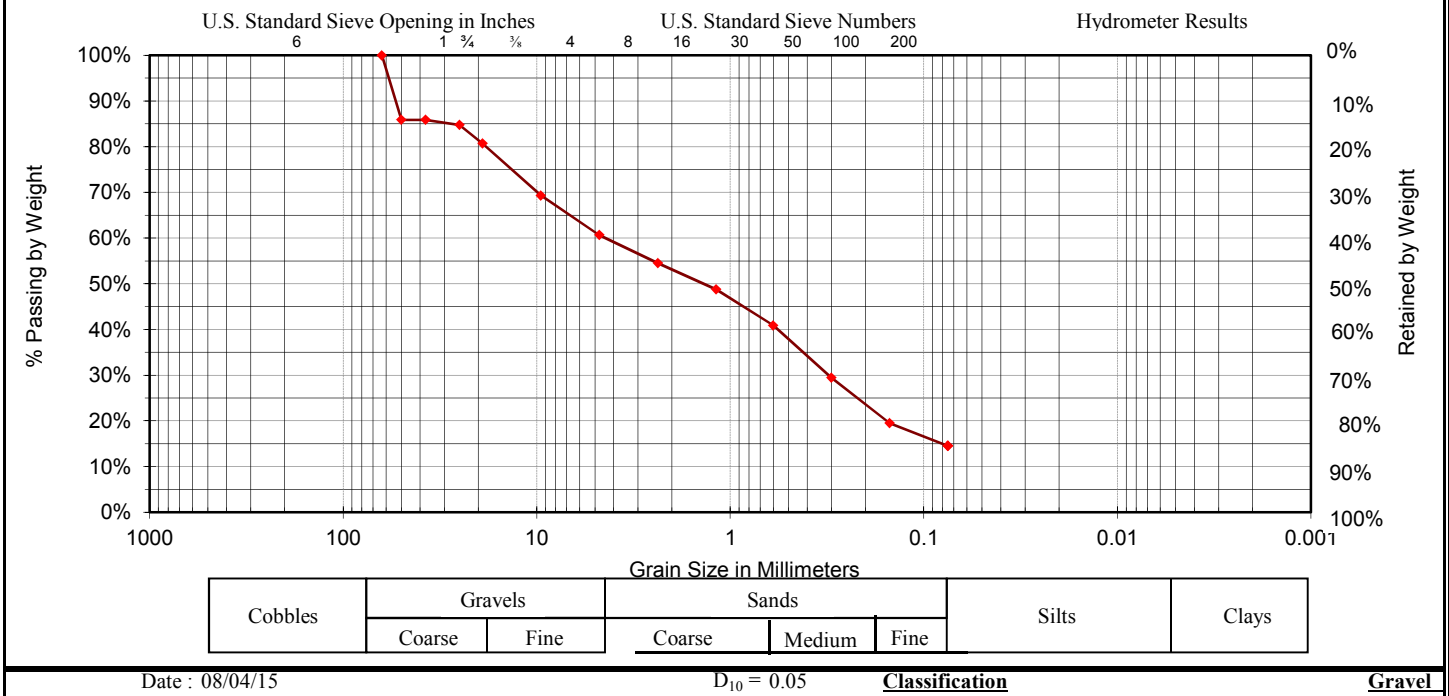
CLIENT: MOLTZ CONSTRUCTORS PROJECT: CONTINENTAL DAM	LOCATION: HINSDALE COUNTY, CO	PROJECT NUMBER: 15096	FIGURE: P-2

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MOUNTAIN ENGINEERING & TESTING

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Gradation Test Results
ASTM C136



Date :	08/04/15	D_{10} = 0.05	**Classification**	**Gravel**
Sample #:	4	D_{30} = 0.32	SM, Silty Sand with Gravel	39.3%
Sample Use:	Common Fill	D_{60} = 4.49	**AASHTO Classification**	**Sand**
Source:	E Side of Stockpile	C_C = 0.43	N/A	46.2%
Client:	Moltz Constructors, Inc.	$C_{U=}$ 86.92	**Atterberg Classification**	**Silt & Clay**
Project Location:	Hinsdale County, CO	Liquid Limit= NV	NP = Non Plastic	14.5%
Boring #:	N/A	Plastic Limit= NP	**Water Soluble Sulfates**	**Moisture Content**
Depth:	N/A	Plasticity Index= NP	N/A	12.4%

Coarse Section						**Fines Section**					
Sieve Size		Cumulative Percent	Cumulative Percent	Specs	Specs	Sieve Size		Cumulative Percent	Cumulative Percent	Specs	Specs
US (in.)	Metric (mm)	Retained	Passing	Max	Min	US (in.)	Metric (mm)	Retained	Passing	Max	Min
6.00"	150.00		100%			#8	2.360	45%	55%		
4.00"	100.00		100%			#16	1.180	51%	49%		
3.00"	75.00		100%		100%	#30	0.600	59%	41%		
2.50"	63.00	0%	100%			#50	0.300	71%	29%		
2.00"	50.00	14%	86%			#100	0.150	81%	19%		
1.50"	37.50	14%	86%			#200	0.075	85.5%	14.5%	20%	
1.00"	25.00	15%	85%								
3/4"	19.00	19%	81%								
3/8"	9.50	31%	69%								
#4	4.75	39%	61%								

Project Name: Continental Dam	Project Number: 15096	Figure: G-3

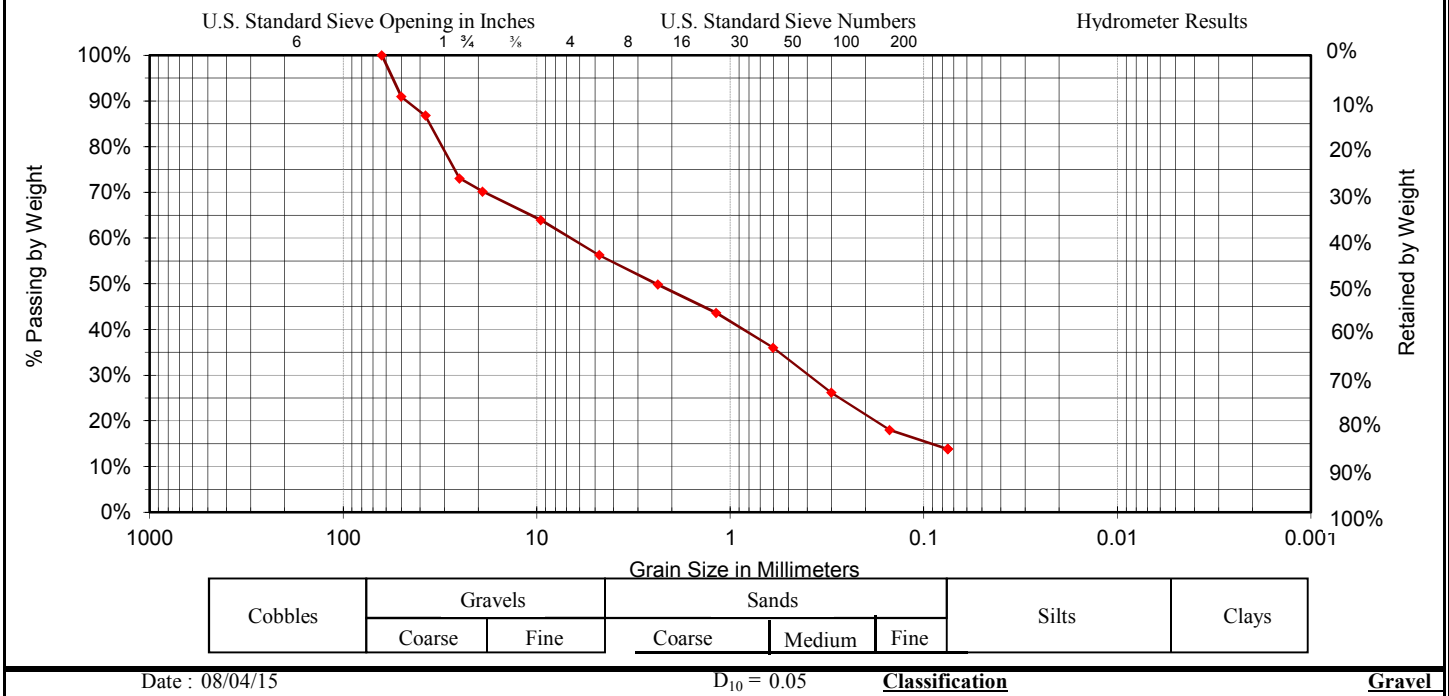
Sample Meets Revised Common Fill Gradation Specification

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Gradation Test Results
ASTM C136



Date :	08/04/15	D_{10} =	0.05	**Classification**	**Gravel**
Sample #:	5	D_{30} =	0.42	GC-GM, Silty,Clayey Gravel with Sand	43.8%
Sample Use:	Common Fill	D_{60} =	7.08	**AASHTO Classification**	**Sand**
Source:	W Side of Stockpile	C_C =	0.45	N/A	42.4%
Client:	Moltz Constructors, Inc.	$C_{U=}$	130.21	**Atterberg Classification**	**Silt & Clay**
Project Location:	Hinsdale County, CO	Liquid Limit=	25	CL-ML=Silty Clay	13.8%
Boring #:	N/A	Plastic Limit=	21	**Water Soluble Sulfates**	**Moisture Content**
Depth:	N/A	Plasticity Index=	4	N/A	12.0%

Coarse Section						**Fines Section**					
Sieve Size		Cumulative Percent	Cumulative Percent	Specs	Specs	Sieve Size		Cumulative Percent	Cumulative Percent	Specs	Specs
US (in.)	Metric (mm)	Retained	Passing	Max	Min	US (in.)	Metric (mm)	Retained	Passing	Max	Min
6.00"	150.00		100%			#8	2.360	50%	50%		
4.00"	100.00		100%			#16	1.180	56%	44%		
3.00"	75.00		100%		100%	#30	0.600	64%	36%		
2.50"	63.00	0%	100%			#50	0.300	74%	26%		
2.00"	50.00	9%	91%			#100	0.150	82%	18%		
1.50"	37.50	13%	87%			#200	0.075	86.2%	13.8%	20%	
1.00"	25.00	27%	73%								
3/4"	19.00	30%	70%								
3/8"	9.50	36%	64%								
#4	4.75	44%	56%								

Project Name: Continental Dam	Project Number: 15096	Figure: G-4

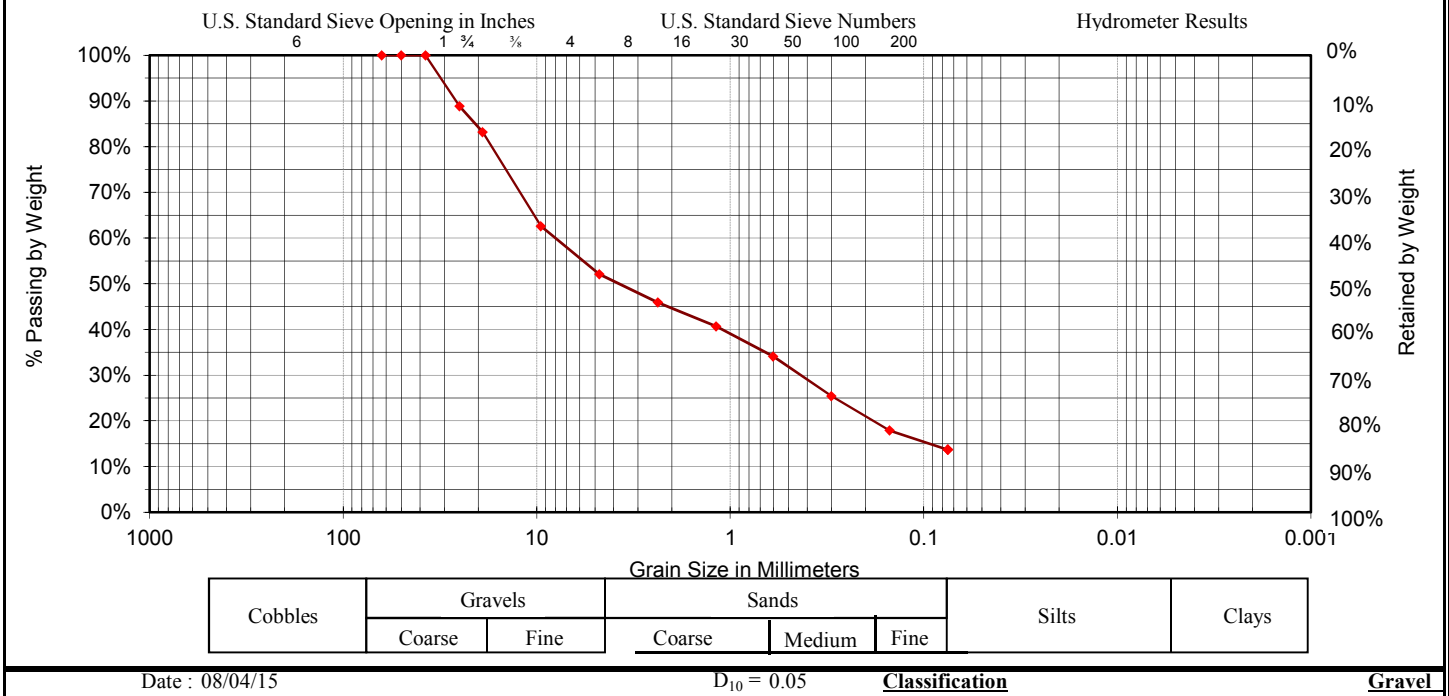
Sample Meets Revised Common Fill Gradation Specification

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MOUNTAIN ENGINEERING & TESTING

2035 1/2 Grande Avenue
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Gradation Test Results
ASTM C136



Date :	08/04/15	D_{10} =	0.05	**Classification**	**Gravel**
Sample #:	6	D_{30} =	0.46	GC-GM, Silty,Clayey Gravel with Sand	47.9%
Sample Use:	Common Fill	D_{60} =	8.33	**AASHTO Classification**	**Sand**
Source:	NE Side of Stockpile	C_C =	0.46	N/A	38.4%
Client:	Moltz Constructors, Inc.	$C_{U=}$	151.86	**Atterberg Classification**	**Silt & Clay**
Project Location:	Hinsdale County, CO	Liquid Limit=	24	CL-ML=Silty Clay	13.7%
Boring #:	N/A	Plastic Limit=	18	**Water Soluble Sulfates**	**Moisture Content**
Depth:	N/A	Plasticity Index=	6	N/A	12.9%

Coarse Section						**Fines Section**					
Sieve Size		Cumulative Percent	Cumulative Percent	Specs	Specs	Sieve Size		Cumulative Percent	Cumulative Percent	Specs	Specs
US (in.)	Metric (mm)	Retained	Passing	Max	Min	US (in.)	Metric (mm)	Retained	Passing	Max	Min
6.00"	150.00		100%			#8	2.360	54%	46%		
4.00"	100.00		100%			#16	1.180	59%	41%		
3.00"	75.00		100%		100%	#30	0.600	66%	34%		
2.50"	63.00		100%			#50	0.300	75%	25%		
2.00"	50.00		100%			#100	0.150	82%	18%		
1.50"	37.50	0%	100%			#200	0.075	86.3%	13.7%	20%	
1.00"	25.00	11%	89%								
3/4"	19.00	17%	83%								
3/8"	9.50	37%	63%								
#4	4.75	48%	52%								

Project Name: Continental Dam	Project Number: 15096	Figure: G-5

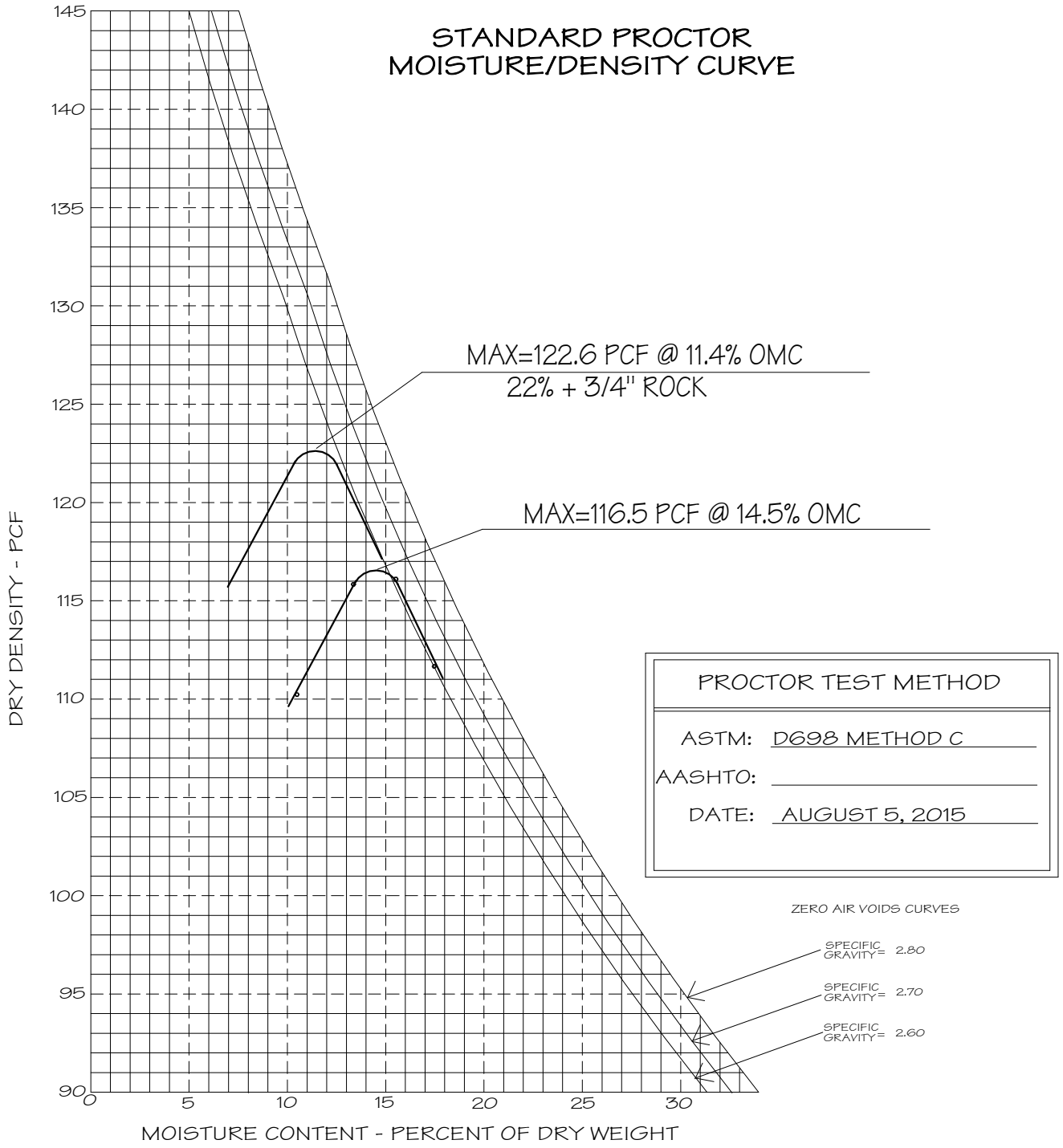
Sample Meets Revised Common Fill Gradation Specification

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MOUNTAIN ENGINEERING & TESTING

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STANDARD PROCTOR
MOISTURE/DENSITY CURVE



PROCTOR TEST METHOD	
ASTM:	D698 METHOD C
AASHTO:	
DATE:	AUGUST 5, 2015

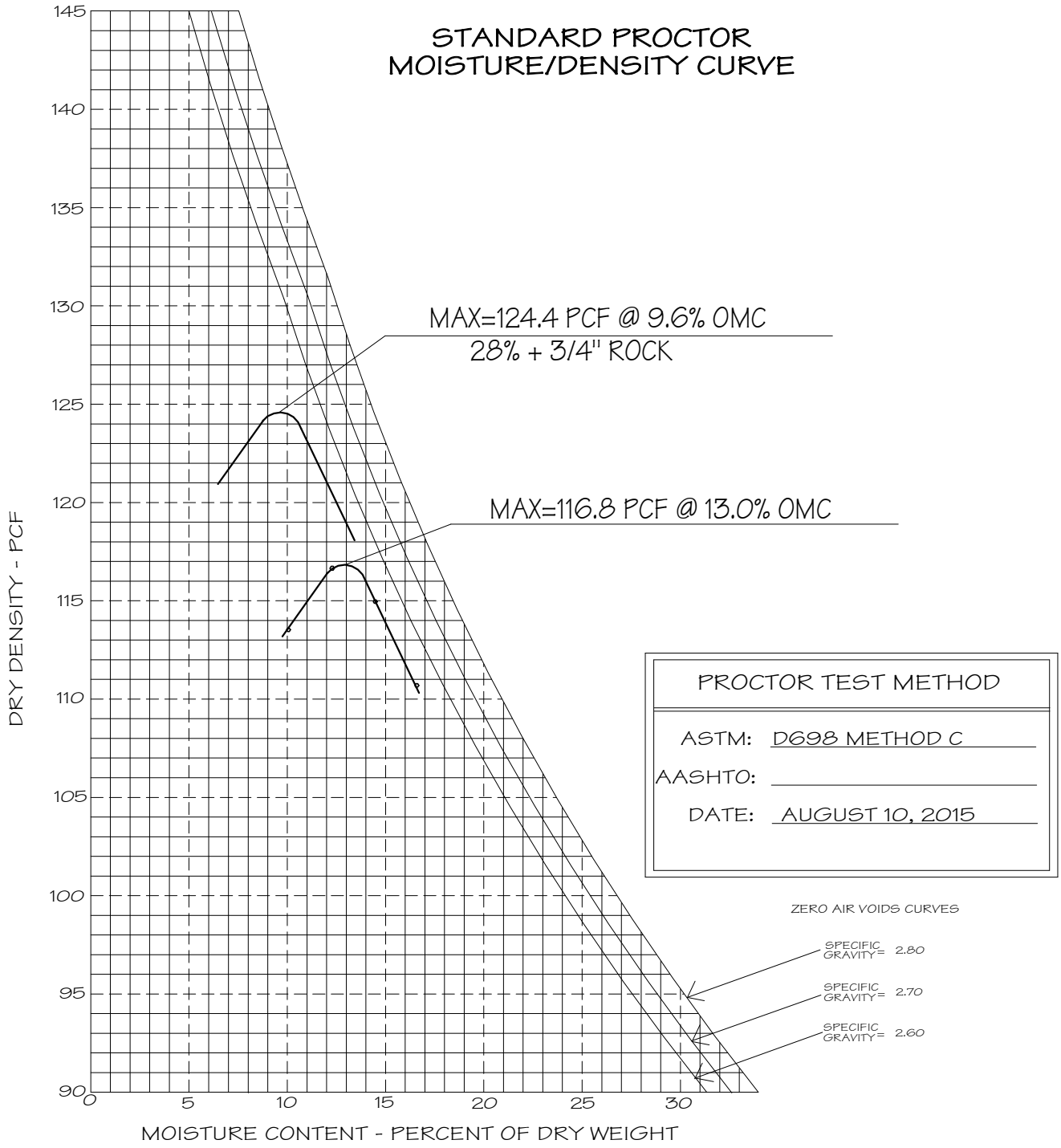
SAMPLE NUMBER: 4 SAMPLE USE: COMMON FILL MATERIAL TYPE: E SIDE OF STOCKPILE	GRAVEL(%): 39.3 SAND(%): 46.2 SILT & CLAY(%): 14.5	LIQUID LIMIT: NV PLASTICITY INDEX: NP	
CLIENT: MOLTZ CONSTRUCTORS PROJECT: CONTINENTAL DAM	LOCATION: HINSDALE COUNTY, CO	PROJECT NUMBER: 15096	FIGURE: P-3

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MOUNTAIN ENGINEERING & TESTING

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STANDARD PROCTOR MOISTURE/DENSITY CURVE



PROCTOR TEST METHOD	
ASTM:	D698 METHOD C
AASHTO:	
DATE:	AUGUST 10, 2015

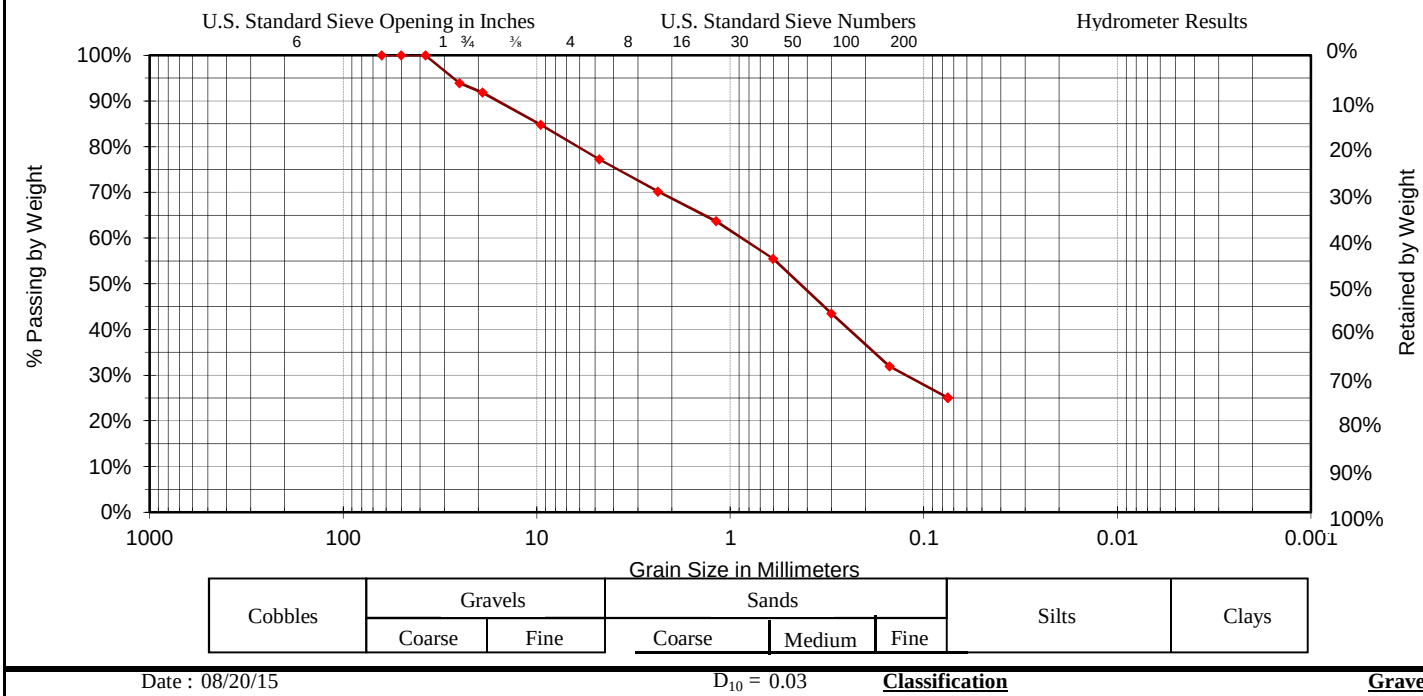
SAMPLE NUMBER: 5	GRAVEL(%): 43.8	LIQUID LIMIT: 25	
SAMPLE USE: COMMON FILL	SAND(%): 42.4	PLASTICITY INDEX: 4	
MATERIAL TYPE: W. SIDE OF STOCKPILE	SILT & CLAY(%): 13.8		
CLIENT: MOLTZ CONSTRUCTORS PROJECT: CONTINENTAL DAM	LOCATION: HINSDALE COUNTY, CO	PROJECT NUMBER: 15096	FIGURE: P4-G4

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MOUNTAIN ENGINEERING & TESTING

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Gradation Test Results
ASTM C136



Date :	08/20/15	D_{10} =	0.03	**Classification**	**Gravel**
Sample #:	10	D_{30} =	0.13	SM, Silty Sand with Gravel	22.8%
Sample Use:	Common Fill	D_{60} =	0.92	**AASHTO Classification**	**Sand**
Source:	Borrow (7' Into Hillside)	C_C =	0.61	N/A	52.2%
Client:	Moltz Constructors, Inc.	C_U =	30.72	**Atterberg Classification**	**Silt & Clay**
Project Location:	Hinsdale County, CO	Liquid Limit=	NV	NP = Non Plastic	25.0%
Boring #:	N/A	Plastic Limit=	NP	**Water Soluble Sulfates**	**Moisture Content**
Depth:	N/A	Plasticity Index=	NP	N/A	9.1%

Coarse Section						**Fines Section**					
Sieve Size US (in.)	Metric (mm)	Cumulative Percent Retained	Cumulative Percent Passing	Specs Max	Specs Min	Sieve Size US (in.)	Metric (mm)	Cumulative Percent Retained	Cumulative Percent Passing	Specs Max	Specs Min
6.00"	150.00		100%			#8	2.360	30%	70%		
4.00"	100.00		100%			#16	1.180	36%	64%		
3.00"	75.00		100%		100%	#30	0.600	45%	55%		
2.50"	63.00		100%			#50	0.300	57%	43%		
2.00"	50.00		100%			#100	0.150	68%	32%		
1.50"	37.50	0%	100%			#200	0.075	75.0%	**25.0%**	20%	
1.00"	25.00	6%	94%								
3/4"	19.00	8%	92%								
3/8"	9.50	15%	85%								
#4	4.75	23%	77%								

Project Name: Continental Dam	Project Number: 15096	Figure: G-9

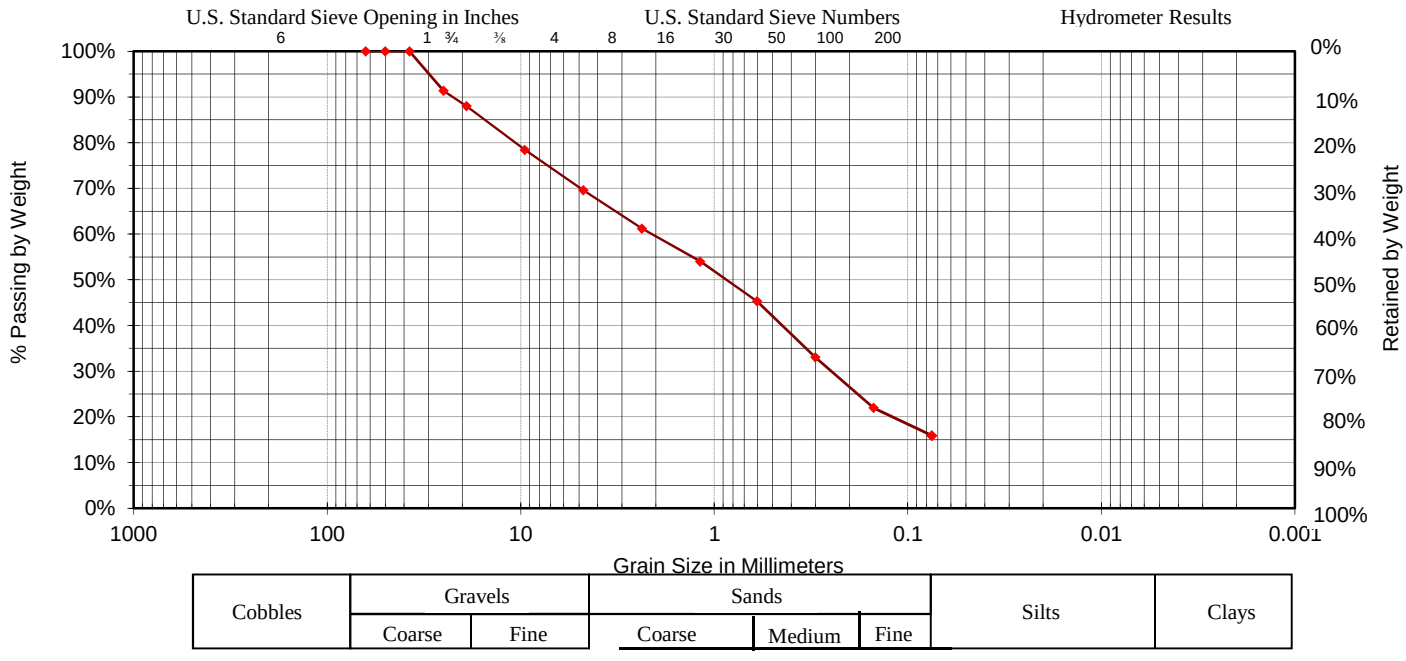
Sample Does Not Meet Revised Common Fill Gradation Specification

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MOUNTAIN ENGINEERING & TESTING

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Gradation Test Results
ASTM C136



Date :	08/31/15	D_{10} = 0.05	**Classification**	**Gravel**
Sample #:	11	D_{30} = 0.26	SM, Silty Sand with Gravel	30.4%
Sample Use:	Common Fill Borrow	D_{60} = 2.17	**AASHTO Classification**	**Sand**
Source:	In-Place Filter Blanket (+40')	C_C = 0.66	N/A	53.7%
Client:	Moltz Constructors, Inc.	C_U = 45.81	**Atterberg Classification**	**Silt & Clay**
Project Location:	Hinsdale County, CO	Liquid Limit= NV	NP = Non Plastic	15.9%
Boring #:	N/A	Plastic Limit= NP	**Water Soluble Sulfates**	**Moisture Content**
Depth:	N/A	Plasticity Index= NP	N/A	9.5%

Coarse Section						**Fines Section**					
Sieve Size US (in.)	Metric (mm)	Cumulative Percent Retained	Cumulative Percent Passing	Specs Max	Specs Min	Sieve Size US (in.)	Metric (mm)	Cumulative Percent Retained	Cumulative Percent Passing	Specs Max	Specs Min
6.00"	150.00		100%			#8	2.360	39%	61%		
4.00"	100.00		100%			#16	1.180	46%	54%		
3.00"	75.00		100%		100%	#30	0.600	55%	45%		
2.50"	63.00		100%			#50	0.300	67%	33%		
2.00"	50.00		100%			#100	0.150	78%	22%		
1.50"	37.50	0%	100%			#200	0.075	84.1%	15.9%	20%	
1.00"	25.00	9%	91%								
3/4"	19.00	12%	88%								
3/8"	9.50	22%	78%								
#4	4.75	30%	70%								

Project Name: Continental Dam	Project Number: 15096	Figure: G-10

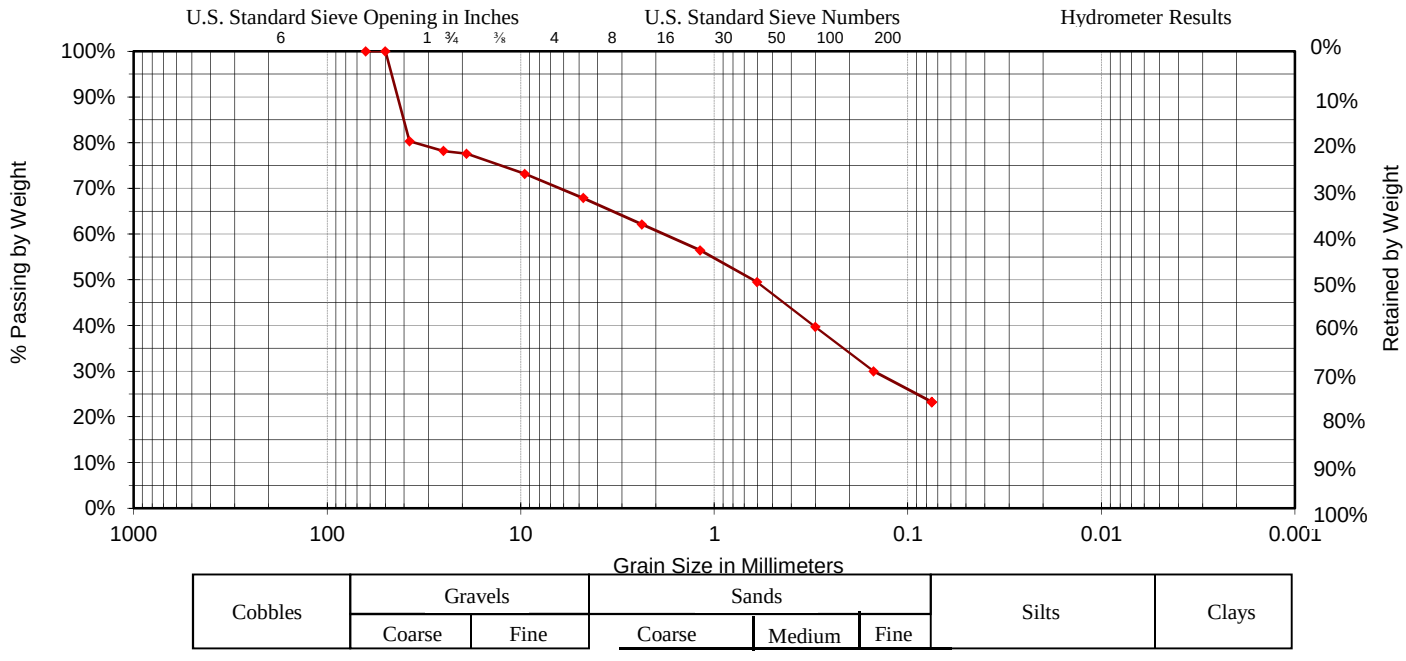
Sample Meets Revised Common Fill Gradation Specification

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Gradation Test Results
ASTM C136



Date :	09/11/15	D_{10} =	0.03	**Classification**	**Gravel**
Sample #:	12	D_{30} =	0.15	SM, Silty Sand with Gravel	32.1%
Sample Use:	Common Fill Borrow	D_{60} =	1.92	**AASHTO Classification**	**Sand**
Source:	In-Place Filter Blanket (+55')	C_C =	0.37	N/A	44.6%
Client:	Moltz Constructors, Inc.	C_U =	59.61	**Atterberg Classification**	**Silt & Clay**
Project Location:	Hinsdale County, CO	Liquid Limit=	NV	NP = Non Plastic	23.2%
Boring #:	N/A	Plastic Limit=	NP	**Water Soluble Sulfates**	**Moisture Content**
Depth:	N/A	Plasticity Index=	NP	N/A	8.7%

Coarse Section						**Fines Section**					
Sieve Size US (in.)	Metric (mm)	Cumulative Percent Retained	Cumulative Percent Passing	Specs Max	Specs Min	Sieve Size US (in.)	Metric (mm)	Cumulative Percent Retained	Cumulative Percent Passing	Specs Max	Specs Min
6.00"	150.00		100%			#8	2.360	38%	62%		
4.00"	100.00		100%			#16	1.180	44%	56%		
3.00"	75.00		100%		100%	#30	0.600	51%	49%		
2.50"	63.00		100%			#50	0.300	60%	40%		
2.00"	50.00	0%	100%			#100	0.150	70%	30%		
1.50"	37.50	20%	80%			#200	0.075	76.8%	**23.2%**	20%	
1.00"	25.00	22%	78%								
3/4"	19.00	22%	78%								
3/8"	9.50	27%	73%								
#4	4.75	32%	68%								

Project Name: Continental Dam	Project Number: 15096	Figure: G-11

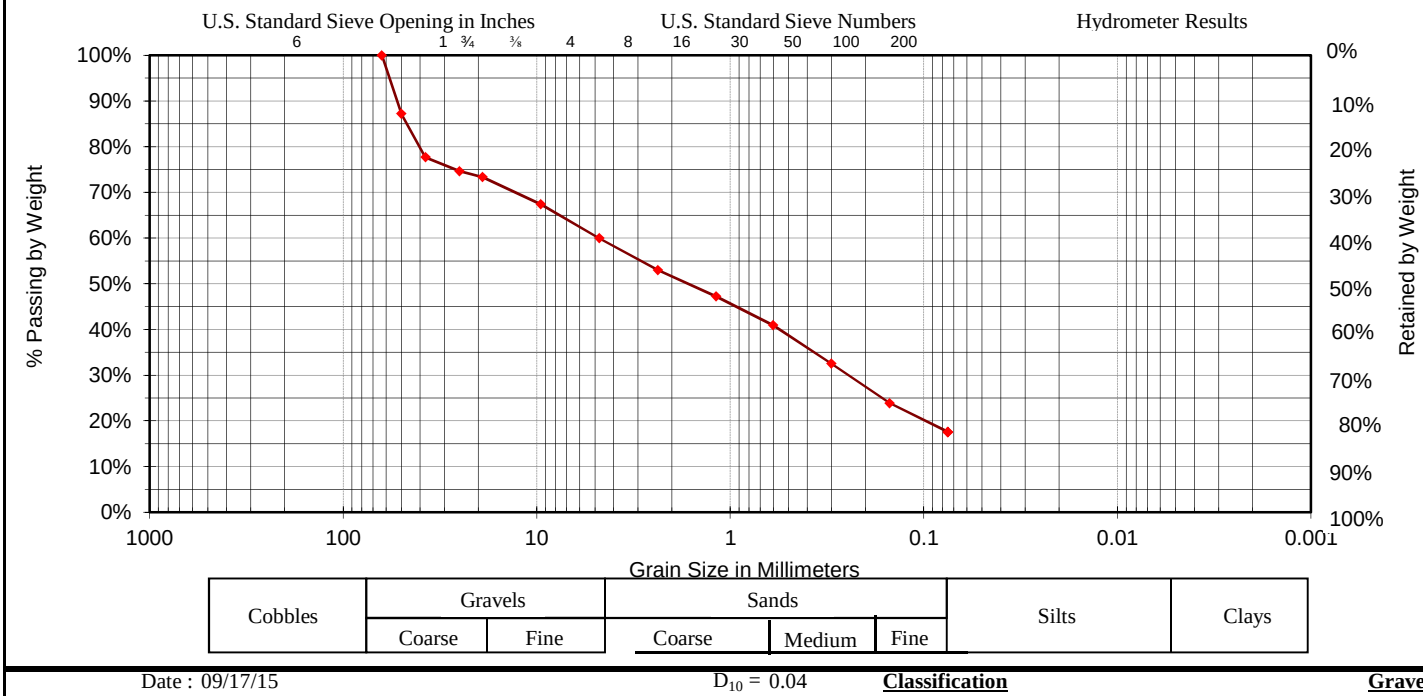
Sample Does Not Meet Revised Common Fill Gradation Specification

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Gradation Test Results
ASTM C136



Date :	09/17/15	D_{10} = 0.04	**Classification**	**Gravel**
Sample #:	13	D_{30} = 0.26	SM, Silty Sand with Gravel	40.0%
Sample Use:	Common Fill Borrow	D_{60} = 4.77	**AASHTO Classification**	**Sand**
Source:	In-Place Filter Blanket (+60')	C_C = 0.32	N/A	42.4%
Client:	Moltz Constructors, Inc.	C_U = 111.71	**Atterberg Classification**	**Silt & Clay**
Project Location:	Hinsdale County, CO	Liquid Limit= NV	NP = Non Plastic	17.6%
Boring #:	N/A	Plastic Limit= NP	**Water Soluble Sulfates**	**Moisture Content**
Depth:	N/A	Plasticity Index= NP	N/A	7.8%

Coarse Section						**Fines Section**					
Sieve Size US (in.)	Metric (mm)	Cumulative Percent Retained	Cumulative Percent Passing	Specs Max	Specs Min	Sieve Size US (in.)	Metric (mm)	Cumulative Percent Retained	Cumulative Percent Passing	Specs Max	Specs Min
6.00"	150.00		100%			#8	2.360	47%	53%		
4.00"	100.00		100%			#16	1.180	53%	47%		
3.00"	75.00		100%		100%	#30	0.600	59%	41%		
2.50"	63.00	0%	100%			#50	0.300	67%	33%		
2.00"	50.00	13%	87%			#100	0.150	76%	24%		
1.50"	37.50	22%	78%			#200	0.075	82.4%	17.6%	20%	
1.00"	25.00	25%	75%								
3/4"	19.00	27%	73%								
3/8"	9.50	33%	67%								
#4	4.75	40%	60%								

Project Name: Continental Dam	Project Number: 15096	Figure: G-12

Sample Meets Revised Common Fill Gradation Specification

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In-Place Compaction

Summary of Soil Compaction (ASTM 2937)

Client	Moltz Constructors, Inc.	Project Number	15096	Date	8/5/2015
Address	PO Box 1030	Project Name	Continental Dam	Report #	3
	Cody, WY 82414	Project Location	Hinsdale County, CO	Technician	Rich Silkey
Attn:	Thomas P. Moltz	cc:		Weather	Partly Cloudy, 70's

Proctor Information					Specifications		Elevation Codes
Type	Max (pcf)	OMC (%)	Figure	Rock Corr	Compaction	OMC	FG=Finish/Final Grade
Filter Sand (ASTM D698)	112.5	14.0	P1	N/A	90-95%	N/A	SG=Subgrade
Common Fill (ASTM D698)	119.3	13.3	P2	13.0%	95%	+/-2 %	BCG=Base Course Grade
							TOP=Top Of Pipe
							BG=Below Grade

				Compaction				Moisture		
Test #	Test Locations:	Elevation	Soil Type	Field Dry Density (pcf)	Maximum Dry Density (pcf)	Compaction (%)	Pass/Fail	Field Moisture (%)	Optimum Moisture (%)	
1	30' E. of Left Groin, Toe Drain	+10'	P1	103.3	112.5	91.8%	P	6.7	14.0	N/A
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										

Compaction Equipment:	Vibratory/Non-Vibratory	Tire Roll	Smooth Drum	Sheep's Foot	Jumping Jack	**Other**
Test Location Established by:	Grid Lines	Contractor	Survey	**Estimation**		
Test Elevation Established by:	Survey	**Contractor**	**Estimation**			

Remarks: Rich Silkey was onsite to perform moisture density testing on the filter sand percolation test area, at the toe of the dam. Elevations are from bottom of fill. Two track hoe bucket tamps were used to compact the filter sand. Results were given to Joe with AECOM.

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Summary of Soil Compaction (ASTM 2937)

Client	Moltz Constructors, Inc.	Project Number	15096	Date	8/6/2015
Address	PO Box 1030	Project Name	Continental Dam	Report #	4
	Cody, WY 82414	Project Location	Hinsdale County, CO	Technician	Rich Silkey
Attn:	Thomas P. Moltz	cc:		Weather	Clear, 70's

Proctor Information					Specifications		Elevation Codes
Type	Max (pcf)	OMC (%)	Figure	Rock Corr	Compaction	OMC	FG=Finish/Final Grade
Filter Sand (ASTM D698)	112.5	14.0	P1	N/A	90-95%	N/A	SG=Subgrade
Common Fill (ASTM D698)	119.3	13.3	P2	13.0%	95%	+/-2 %	BCG=Base Course Grade
							TOP=Top Of Pipe
							BG=Below Grade

				Compaction				Moisture		
Test #	Test Locations:	Elevation	Soil Type	Field Dry Density (pcf)	Maximum Dry Density (pcf)	Compaction (%)	Pass/Fail	Field Moisture (%)	Optimum Moisture (%)	
1	20' W. of Right Groin, Toe Drain	+12'	P1	103.6	112.5	92.1%	P	6.7	14.0	N/A
2	75' W. of Right Groin, Toe Drain	+12'	P1	101.7	112.5	90.4%	P	7.6	14.0	N/A
3	30' E. of Left Groin, Toe Drain	+12'	P1	104.3	112.5	92.7%	P	6.2	14.0	N/A
4										
5										
6										
7										
8										
9										
10										
11										

Compaction Equipment:	Vibratory/Non-Vibratory	Tire Roll	Smooth Drum	Sheep's Foot	Jumping Jack	**Other**
Test Location Established by:	Grid Lines	Contractor	Survey		**Estimation**	
Test Elevation Established by:	Survey	**Contractor**	**Estimation**			

Remarks: Rich Silkey was onsite to perform moisture density testing on the filter sand at the toe of the dam. Elevations are from bottom of fill. Two track hoe bucket tamps were used to compact the filter sand. Results were given to Joe with AECOM.

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Summary of Soil Compaction (ASTM 2937)

Client	Moltz Constructors, Inc.	Project Number	15096	Date	8/7/2015
Address	PO Box 1030	Project Name	Continental Dam	Report #	5
	Cody, WY 82414	Project Location	Hinsdale County, CO	Technician	Rich Silkey
Attn:	Thomas P. Moltz	cc:		Weather	Mostly Cloudy, 70's

Proctor Information					Specifications		Elevation Codes
Type	Max (pcf)	OMC (%)	Figure	Rock Corr	Compaction	OMC	FG=Finish/Final Grade
Filter Sand (ASTM D698)	112.5	14.0	P1	N/A	90-95%	N/A	SG=Subgrade
Common Fill (ASTM D698)	119.3	13.3	P2	13.0%	95%	+/-2 %	BCG=Base Course Grade
Common Fill (ASTM D698)	122.6	11.4	P3	22.0%	95%	+/-2 %	TOP=Top Of Pipe
							BG=Below Grade

				Compaction				Moisture		
Test #	Test Locations:	Elevation	Soil Type	Field Dry Density (pcf)	Maximum Dry Density (pcf)	Compaction (%)	Pass/Fail	Field Moisture (%)	Optimum Moisture (%)	
1	Common Fill Toe, 30' W. of Spillway	+12'	P3	117.1	122.6	95.5%	P	9.4	11.4	P
2	Common Fill Toe, 40' W. of Spillway	+16'	P3	119.3	122.6	97.3%	P	11.2	11.4	P
3	Common Fill, 50' W. of Spillway, Above Drain	+16'	P2	114.3	119.3	95.8%	P	11.3	13.3	P
4	Filter Sand, 60' West of Right Groin	+16'	P1	103.5	112.5	92.0%	P	6.4	14.0	N/A
5										
6										
7										
8										
9										
10										
11										

Compaction Equipment:	**Vibratory**/Non-Vibratory	Tire Roll	**Smooth Drum**	Sheep's Foot	Jumping Jack	**Other**
Test Location Established by:	Grid Lines	Contractor	Survey	**Estimation**		
Test Elevation Established by:	Survey	**Contractor**	**Estimation**			

Remarks: Rich Silkey was onsite to perform moisture density testing on the filter sand and common fill along the dam toe. Elevations are from bottom of fill. Two track hoe bucket tamps were used to compact the filter sand and a vibratory smooth drum was used on the common fill. Results were given to Joe with AECOM and Ron with ACA.

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Summary of Soil Compaction (ASTM 2937)

Client	Moltz Constructors, Inc.	Project Number	15096	Date	8/10/2015
Address	PO Box 1030	Project Name	Continental Dam	Report #	6
	Cody, WY 82414	Project Location	Hinsdale County, CO	Technician	Rich Silkey
Attn:	Thomas P. Moltz	cc:		Weather	Clear, 70's

Proctor Information					Specifications		Elevation Codes
Type	Max (pcf)	OMC (%)	Figure	Rock Corr	Compaction	OMC	FG=Finish/Final Grade
Filter Sand (ASTM D698)	112.5	14.0	P1	N/A	90-95%	N/A	SG=Subgrade
Common Fill (ASTM D698)	119.3	13.3	P2	13.0%	95%	+/-2 %	BCG=Base Course Grade
Common Fill (ASTM D698)	122.6	11.4	P3	22.0%	95%	+/-2 %	TOP=Top Of Pipe
							BG=Below Grade

				Compaction				Moisture		
Test #	Test Locations:	Elevation	Soil Type	Field Dry Density (pcf)	Maximum Dry Density (pcf)	Compaction (%)	Pass/Fail	Field Moisture (%)	Optimum Moisture (%)	
1	Filter Sand, 20' E. of Left Groin	+20'	P1	103.4	112.5	91.9%	P	6.6	14.0	N/A
2	Filter Sand, 50' E. of Left Groin	+20'	P1	106.1	112.5	94.3%	P	6.5	14.0	N/A
3	Filter Sand, 30' W. of Spillway	+20'	P1	105.0	112.5	93.3%	P	6.3	14.0	N/A
4										
5										
6										
7										
8										
9										
10										
11										

Compaction Equipment:	Vibratory/Non-Vibratory	Tire Roll	Smooth Drum	Sheep's Foot	Jumping Jack	**Other**
Test Location Established by:	Grid Lines	Contractor	Survey		**Estimation**	
Test Elevation Established by:	Survey	**Contractor**	**Estimation**			

Remarks: Rich Silkey was onsite to perform moisture density testing on the filter sand along the dam toe. Elevations are from bottom of fill. Two track hoe bucket tamps were used to compact the filter sand. Results were given to Joe with AECOM and Ron with ACA.

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Summary of Soil Compaction (ASTM 2937)

Client	Moltz Constructors, Inc.	Project Number	15096	Date	8/28/2015
Address	PO Box 1030	Project Name	Continental Dam	Report #	11
	Cody, WY 82414	Project Location	Hinsdale County, CO	Technician	Rich Silkey
Attn:	Thomas P. Moltz	cc:		Weather	Mostly Cloudy, 70's

Proctor Information					Specifications		Elevation Codes
Type	Max (pcf)	OMC (%)	Figure	Rock Corr	Compaction	OMC	FG=Finish/Final Grade
Filter Sand (ASTM D698)	112.5	14.0	P1	N/A	90-95%	N/A	SG=Subgrade
Common Fill (ASTM D698)	119.3	13.3	P2	13.0%	95%	+/-2 %	BCG=Base Course Grade
Common Fill (ASTM D698)	122.6	11.4	P3	22.0%	95%	+/-2 %	TOP=Top Of Pipe
Common Fill (ASTM D698)	124.4	9.6	P4	28.0%	95%	+/-2 %	BG=Below Grade

				Compaction				Moisture		
Test #	Test Locations: Filter Blanket	Elevation	Soil Type	Field Dry Density (pcf)	Maximum Dry Density (pcf)	Compaction (%)	Pass/Fail	Field Moisture (%)	Optimum Moisture (%)	Pass/Fail
1	Filter Sand, Left Groin	+43'	P1	102.5	112.5	91.1%	P	7.0	14.0	N/A
2	Filter Sand, 75' E. of Left Groin	+43'	P1	105.4	112.5	93.7%	P	6.4	14.0	N/A
3	Filter Sand, 5' W. of Spillway	+43'	P1	104.3	112.5	92.7%	P	7.4	14.0	N/A
4	Common Fill, Left Groin	+40'	P4	126.0	124.4	+100%	P	8.5	9.6	P
5	Common Fill, 80' E. of Left Groin	+40'	P4	124.5	124.4	+100%	P	8.7	9.6	P
6	Common Fill, 20' W. of Spillway	+40'	P4	118.4	124.4	95.2%	P	8.8	9.6	P
7										
8										
9										
10										
11										

Compaction Equipment:	**Vibratory**/Non-Vibratory	**Tire Roll**	**Smooth Drum**	Sheep's Foot	Jumping Jack	**Other**
Test Location Established by:	Grid Lines	Contractor	Survey	**Estimation**		
Test Elevation Established by:	Survey	Contractor	**Estimation**			

Remarks: Rich Silkey was onsite to perform moisture density testing on the filter blanket filter sand and common fill. Elevations are from bottom of fill. Two track hoe bucket tamps were used to compact the filter sand and a vibratory smooth drum followed by wheel rolling with a haul truck were used to compact the common fill. A sample of the common fill was collected for gradation analysis after visual observation of the in-situ fill. Results were given to Joe with AECOM and Ron with ACA.

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Summary of Soil Compaction (ASTM 2937)

Client	Moltz Constructors, Inc.	Project Number	15096	Date	9/2/2015
Address	PO Box 1030	Project Name	Continental Dam	Report #	12
	Cody, WY 82414	Project Location	Hinsdale County, CO	Technician	Rich Silkey
Attn:	Thomas P. Moltz	cc:		Weather	Mostly Cloudy, 60's

Proctor Information					Specifications		Elevation Codes
Type	Max (pcf)	OMC (%)	Figure	Rock Corr	Compaction	OMC	FG=Finish/Final Grade
Filter Sand (ASTM D698)	112.5	14.0	P1	N/A	90-95%	N/A	SG=Subgrade
Common Fill (ASTM D698)	119.3	13.3	P2	13.0%	95%	+/-2 %	BCG=Base Course Grade
Common Fill (ASTM D698)	122.6	11.4	P3	22.0%	95%	+/-2 %	TOP=Top Of Pipe
Common Fill (ASTM D698)	124.4	9.6	P4	28.0%	95%	+/-2 %	BG=Below Grade

				Compaction				Moisture		
Test #	Test Locations: Filter Blanket	Elevation	Soil Type	Field Dry Density (pcf)	Maximum Dry Density (pcf)	Compaction (%)	Pass/Fail	Field Moisture (%)	Optimum Moisture (%)	Pass/Fail
1	Filter Sand, Left Groin	+48'	P1	101.3	112.5	90.0%	P	7.6	14.0	N/A
2	Filter Sand, 75' E. of Left Groin	+48'	P1	103.5	112.5	92.0%	P	6.9	14.0	N/A
3	Filter Sand, 35' W. of Spillway	+48'	P1	104.7	112.5	93.1%	P	6.6	14.0	N/A
4	Common Fill, 15' E. of Left Groin	+48'	P3	120.1	122.6	98.0%	P	9.7	11.4	P
5	Common Fill, 75' E. of Left Groin	+48'	P4	122.8	124.4	98.7%	P	9.7	9.6	P
6	Common Fill, 25' W. of Spillway	+48'	P3	120.8	122.6	98.5%	P	9.8	11.4	P
7	Common Fill, 20' W. of Spillway	+43'	P3	116.5	122.6	95.0%	P	10.2	11.4	P
8										
9										
10										
11										

Compaction Equipment:	**Vibratory**/Non-Vibratory	**Tire Roll**	**Smooth Drum**	Sheep's Foot	Jumping Jack	**Other**
Test Location Established by:	Grid Lines	Contractor	Survey	**Estimation**		
Test Elevation Established by:	Survey	Contractor	**Estimation**			

Remarks: Rich Silkey was onsite to perform moisture density testing on the filter blanket filter sand and common fill. Elevations are from bottom of fill. Two track hoe bucket tamps were used to compact the filter sand and a vibratory smooth drum followed by wheel rolling with a haul truck were used to compact the common fill. Test #7 was pot holed down to test elevation. Results were given to Joe with AECOM and Ron with ACA.

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Summary of Soil Compaction (ASTM 2937)

Client	Moltz Constructors, Inc.	Project Number	15096	Date	9/10/2015
Address	PO Box 1030	Project Name	Continental Dam	Report #	13
	Cody, WY 82414	Project Location	Hinsdale County, CO	Technician	Rich Silkey
Attn:	Thomas P. Moltz	cc:		Weather	Clear, 70's

Proctor Information					Specifications		Elevation Codes
Type	Max (pcf)	OMC (%)	Figure	Rock Corr	Compaction	OMC	FG=Finish/Final Grade
Filter Sand (ASTM D698)	112.5	14.0	P1	N/A	90-95%	N/A	SG=Subgrade
Common Fill (ASTM D698)	119.3	13.3	P2	13.0%	95%	+/-2 %	BCG=Base Course Grade
Common Fill (ASTM D698)	122.6	11.4	P3	22.0%	95%	+/-2 %	TOP=Top Of Pipe
Common Fill (ASTM D698)	124.4	9.6	P4	28.0%	95%	+/-2 %	BG=Below Grade

				Compaction				Moisture		
Test #	Test Locations: Filter Blanket	Elevation	Soil Type	Field Dry Density (pcf)	Maximum Dry Density (pcf)	Compaction (%)	Pass/Fail	Field Moisture (%)	Optimum Moisture (%)	Pass/Fail
1	Common Fill, 10' N. of Drain Gravel, 75' E. of L. Groin	+55'	P3	117.9	122.6	96.2%	P	8.1	11.4	F
2	Common Fill, 5' N. of Drain Gravel, 50' W. of Spillway	+55'	P3	119.9	122.6	97.8%	P	9.1	11.4	F
3	Common Fill, 20' N. of Drain Gravel, 25' W. of Spillway	+55'	P3	116.6	122.6	95.1%	P	8.5	11.4	F
4	Common Fill, 30' N. of Drain Gravel, 125' W. of Spillway	+55'	P4	124.0	124.4	99.7%	P	7.9	9.6	P
5	Common Fill, 20' N. of Drain Gravel, 125' W. of Spillway	+52'	P3	117.9	122.6	96.2%	P	10.0	11.4	P
6	Filter Sand, 15' W. of Spillway	+55'	P1	105.3	112.5	93.6%	P	7.0	14.0	N/A
7	Filter Sand, 90' W. of Spillway	+55'	P1	104.3	112.5	92.7%	P	6.6	14.0	N/A
8	Filter Sand, 165' W. of Spillway	+55'	P1	104.4	112.5	92.8%	P	6.7	14.0	N/A
9	Filter Sand, Left Groin	+55'	P1	102.3	112.5	90.9%	P	6.7	14.0	N/A
10										
11										

Compaction Equipment:	**Vibratory**/Non-Vibratory	**Tire Roll**	**Smooth Drum**	Sheep's Foot	Jumping Jack	Other
Test Location Established by:	Grid Lines	Contractor	Survey	**Estimation**		
Test Elevation Established by:	Survey	Contractor	**Estimation**			

Remarks: Rich Silkey was onsite to perform moiture and density testing on the filter blanket common fill and filter sand. The surface for tests #1-4 was dry when tested and may not be representative of the moisture when placed and compacted. Test #5 was pot holed with a bull dozer and the moisture was representative of placement. Results were given to Joe Owen with AECOM and Ron with ACA.

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Summary of Soil Compaction (ASTM 2937)

Client	Moltz Constructors, Inc.	Project Number	15096	Date	9/15/2015
Address	PO Box 1030	Project Name	Continental Dam	Report #	14
	Cody, WY 82414	Project Location	Hinsdale County, CO	Technician	Rich Silkey
Attn:	Thomas P. Moltz	cc:		Weather	Partly Cloudy, 60's

Proctor Information					Specifications		Elevation Codes
Type	Max (pcf)	OMC (%)	Figure	Rock Corr	Compaction	OMC	FG=Finish/Final Grade
Filter Sand (ASTM D698)	112.5	14.0	P1	N/A	90-95%	N/A	SG=Subgrade
Common Fill (ASTM D698)	119.3	13.3	P2	13.0%	95%	+/-2 %	BCG=Base Course Grade
Common Fill (ASTM D698)	122.6	11.4	P3	22.0%	95%	+/-2 %	TOP=Top Of Pipe
Common Fill (ASTM D698)	124.4	9.6	P4	28.0%	95%	+/-2 %	BG=Below Grade

				Compaction				Moisture		
Test #	Test Locations: Filter Blanket	Elevation	Soil Type	Field Dry Density (pcf)	Maximum Dry Density (pcf)	Compaction (%)	Pass/Fail	Field Moisture (%)	Optimum Moisture (%)	Pass/Fail
1	Common Fill, 35' W. of Spillway	+60'	P4	123.8	124.4	99.5%	P	7.1	9.6	F
2	Common Fill, 80' W. of Spillway	+60'	P4	126.7	124.4	+100%	P	7.0	9.6	F
3	Common Fill, 100' E. of Left Groin	+60'	P4	124.1	124.4	99.8%	P	6.9	9.6	F
4	Filter Sand, 40' W. of Spillway	+64'	P1	103.4	112.5	91.9%	P	6.6	14.0	N/A
5	Filter Sand, 100' W. of Spillway	+62'	P1	101.5	112.5	90.2%	P	6.7	14.0	N/A
6	Filter Sand, 60' E. of Left Groin	+65'	P1	101.9	112.5	90.6%	P	7.4	14.0	N/A
7										
8										
9										
10										
11										

Compaction Equipment:	**Vibratory**/Non-Vibratory	**Tire Roll**	**Smooth Drum**	Sheep's Foot	Jumping Jack	Other
Test Location Established by:	Grid Lines	Contractor	Survey	**Estimation**		
Test Elevation Established by:	Survey	Contractor	**Estimation**			

Remarks: Rich Silkey was onsite to perform moiture and density testing on the filter blanket common fill and filter sand. The surface for tests #1-3 was dry when tested and may not be representative of the moisture when placed and compacted. Results were given to Joe Owen with AECOM and Ron with ACA.

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MOUNTAIN
ENGINEERING & TESTING

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(719)628-2069

Summary of Soil Compaction (ASTM 2937)

Client	Moltz Constructors, Inc.	Project Number	15096	Date	9/18/2015
Address	PO Box 1030	Project Name	Continental Dam	Report #	15
	Cody, WY 82414	Project Location	Hinsdale County, CO	Technician	Rich Silkey
Attn:	Thomas P. Moltz	cc:		Weather	Clear, 60's

Proctor Information					Specifications		Elevation Codes
Type	Max (pcf)	OMC (%)	Figure	Rock Corr	Compaction	OMC	FG=Finish/Final Grade
Filter Sand (ASTM D698)	112.5	14.0	P1	N/A	90-95%	N/A	SG=Subgrade
Common Fill (ASTM D698)	119.3	13.3	P2	13.0%	95%	+/-2 %	BCG=Base Course Grade
Common Fill (ASTM D698)	122.6	11.4	P3	22.0%	95%	+/-2 %	TOP=Top Of Pipe
Common Fill (ASTM D698)	124.4	9.6	P4	28.0%	95%	+/-2 %	BG=Below Grade

				Compaction				Moisture		
Test #	Test Locations: Filter Blanket	Elevation	Soil Type	Field Dry Density (pcf)	Maximum Dry Density (pcf)	Compaction (%)	Pass/Fail	Field Moisture (%)	Optimum Moisture (%)	Pass/Fail
1	Filter Sand, 15' W. of Spillway	+71'	P1	104.0	112.5	92.4%	P	6.5	14.0	N/A
2	Filter Sand, 90' W. of Spillway	+71'	P1	102.9	112.5	91.5%	P	6.7	14.0	N/A
3	Filter Sand, 200' W. of Spillway	+71'	P1	103.6	112.5	92.1%	P	8.0	14.0	N/A
4	Filter Sand, 10' E. of Left Groin	+71'	P1	104.1	112.5	92.5%	P	7.2	14.0	N/A
5	Common Fill, 30' E. of Left Groin	+66'	P4	119.3	124.4	95.9%	P	6.3	9.4	F
6	Common Fill, 150' E. of Left Groin	+66'	P4	121.3	124.4	97.5%	P	6.2	9.4	F
7	Common Fill, 50' W. of Spillway	+66'	P4	122.4	124.4	98.4%	P	6.8	9.4	F
8										
9										
10										
11										

Compaction Equipment:	**Vibratory**/Non-Vibratory	**Tire Roll**	**Smooth Drum**	Sheep's Foot	Jumping Jack	Other
Test Location Established by:	Grid Lines	Contractor	Survey	**Estimation**		
Test Elevation Established by:	Survey	Contractor	**Estimation**			

Remarks: Rich Silkey was onsite to perform moiture and density testing on the filter blanket common fill and filter sand. Elevations are from bottom of fill. The surface for tests #5-7 was dry when tested and may not be representative of the moisture when placed and compacted. Results were given to Joe Owen with AECOM and Ron with ACA.

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Summary of Soil Compaction (ASTM 2937)

Client	Moltz Constructors, Inc.	Project Number	15096	Date	9/22/2015
Address	PO Box 1030	Project Name	Continental Dam	Report #	16
	Cody, WY 82414	Project Location	Hinsdale County, CO	Technician	Rich Silkey
Attn:	Thomas P. Moltz	cc:		Weather	Scattered Swrs, 60's

Proctor Information					Specifications		Elevation Codes
Type	Max (pcf)	OMC (%)	Figure	Rock Corr	Compaction	OMC	FG=Finish/Final Grade
Filter Sand (ASTM D698)	112.5	14.0	P1	N/A	90-95%	N/A	SG=Subgrade
Common Fill (ASTM D698)	119.3	13.3	P2	13.0%	95%	+/-2 %	BCG=Base Course Grade
Common Fill (ASTM D698)	122.6	11.4	P3	22.0%	95%	+/-2 %	TOP=Top Of Pipe
Common Fill (ASTM D698)	124.4	9.6	P4	28.0%	95%	+/-2 %	BG=Below Grade

				Compaction				Moisture		
Test #	Test Locations: Filter Blanket	Elevation	Soil Type	Field Dry Density (pcf)	Maximum Dry Density (pcf)	Compaction (%)	Pass/Fail	Field Moisture (%)	Optimum Moisture (%)	Pass/Fail
1	Common Fill, 75' West of Spillway	+70'	P3	118.6	122.6	96.7%	P	7.4	11.4	F
2	Common Fill, 150' West of Spillway	+70'	P2	114.7	119.3	96.1%	P	9.3	13.3	F
3	Common Fill, 225' West of Spillway	+70.5'	P3	116.6	122.6	95.1%	P	6.1	11.4	F
4	Filter Sand, 100' West of Spillway	+75'	P1	101.9	112.5	90.6%	P	5.5	14.0	N/A
5	Filter Sand, 175' West of Spillway	+75'	P1	105.8	112.5	94.0%	P	5.8	14.0	N/A
6	Filter Sand, 250' West of Spillway	+75'	P1	104.9	112.5	93.2%	P	5.9	14.0	N/A
7										
8										
9										
10										
11										

Compaction Equipment:	**Vibratory**/Non-Vibratory	**Tire Roll**	**Smooth Drum**	Sheep's Foot	Jumping Jack	Other
Test Location Established by:	Grid Lines	Contractor	Survey	**Estimation**		
Test Elevation Established by:	Survey	Contractor	**Estimation**			

Remarks: Rich Silkey (RS) was onsite to perform moisture density testing on the filter blanket common fill and filter sand. Tests #1 and #2 were taken after excavated 6" below existing grade and are representative on the in place moisture content. Test #3 was taken on the dry surface. RS observed ACA moisture conditioning the common fill soils for the next lift. Results were given to Ron with ACA and Troy with Moltz Construtors.

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Summary of Soil Compaction (ASTM 2937)

Client	Moltz Constructors, Inc.	Project Number	15096	Date	9/24/2015
Address	PO Box 1030	Project Name	Continental Dam	Report #	17
	Cody, WY 82414	Project Location	Hinsdale County, CO	Technician	Rich Silkey
Attn:	Thomas P. Moltz	cc:		Weather	Sunny, 60's

Proctor Information					Specifications		Elevation Codes
Type	Max (pcf)	OMC (%)	Figure	Rock Corr	Compaction	OMC	FG=Finish/Final Grade
Filter Sand (ASTM D698)	112.5	14.0	P1	N/A	90-95%	N/A	SG=Subgrade
Common Fill (ASTM D698)	119.3	13.3	P2	13.0%	95%	+/-2 %	BCG=Base Course Grade
Common Fill (ASTM D698)	122.6	11.4	P3	22.0%	95%	+/-2 %	TOP=Top Of Pipe
Common Fill (ASTM D698)	124.4	9.6	P4	28.0%	95%	+/-2 %	BG=Below Grade

				Compaction				Moisture		
Test #	Test Locations: Filter Blanket	Elevation	Soil Type	Field Dry Density (pcf)	Maximum Dry Density (pcf)	Compaction (%)	Pass/Fail	Field Moisture (%)	Optimum Moisture (%)	Pass/Fail
1	Common Fill, 50' West of Spillway	+78'	P3	113.7	122.6	92.7%	**F**	7.6	11.4	**F**
2	Common Fill, 150' West of Spillway, Pot Hole	+70'	P3	117.9	122.6	96.2%	P	9.4	11.4	P
3	Common Fill, 200' West of Spillway, Pot Hole	+66'	P4	119.5	124.4	96.1%	P	7.7	9.6	P
4	Common Fill, 200' West of Spillway	+78'	P3	120.4	122.6	98.2%	P	8.1	11.4	**F**
5	Filter Sand, 150' West of Spillway	+82'	P1	104.7	112.5	93.1%	P	6.0	14.0	N/A
6	Filter Sand, 50' West of Spillway	+82'	P1	103.3	112.5	91.8%	P	6.4	14.0	N/A
7										
8										
9										
10										
11										

Compaction Equipment:	**Vibratory**/Non-Vibratory	**Tire Roll**	**Smooth Drum**	Sheep's Foot	Jumping Jack	Other
Test Location Established by:	Grid Lines	Contractor	Survey	**Estimation**		
Test Elevation Established by:	Survey	Contractor	**Estimation**			

Remarks: Rich Silkey (RS) was onsite to perform moisture density testing and re-testing on the filter blanket common fill and filter sand. Tests #2 was a re-test for 9/22/2015 report and test #3 was a re-test for 9/18/2015 report. The re-tests were to address previous failing moisture contents tests. The surface tests at elevation +78' remained low on moisture and were to be moisture conditioned, recompacted, and then re-tested on 9/25/15. Results were given to Ron with ACA and Joe with AECOM.

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Summary of Soil Compaction (ASTM 2937)

Client	Moltz Constructors, Inc.	Project Number	15096	Date	9/25/2015
Address	PO Box 1030	Project Name	Continental Dam	Report #	18
	Cody, WY 82414	Project Location	Hinsdale County, CO	Technician	Rich Silkey
Attn:	Thomas P. Moltz	cc:		Weather	Sunny, 30's

Proctor Information					Specifications		Elevation Codes
Type	Max (pcf)	OMC (%)	Figure	Rock Corr	Compaction	OMC	FG=Finish/Final Grade
Filter Sand (ASTM D698)	112.5	14.0	P1	N/A	90-95%	N/A	SG=Subgrade
Common Fill (ASTM D698)	119.3	13.3	P2	13.0%	95%	+/-2 %	BCG=Base Course Grade
Common Fill (ASTM D698)	122.6	11.4	P3	22.0%	95%	+/-2 %	TOP=Top Of Pipe
Common Fill (ASTM D698)	124.4	9.6	P4	28.0%	95%	+/-2 %	BG=Below Grade

				Compaction				Moisture		
Test #	Test Locations: Filter Blanket	Elevation	Soil Type	Field Dry Density (pcf)	Maximum Dry Density (pcf)	Compaction (%)	Pass/Fail	Field Moisture (%)	Optimum Moisture (%)	Pass/Fail
1	Common Fill, Re-Test #4 (9/24/2015 Report)	+78'	P3	116.9	122.6	95.4%	P	9.4	11.4	P
2	Common Fill, Re-Test #1 (9/24/2015 Report)	+78'	P4	122.9	124.4	98.8%	P	8.8	9.6	P
3										
4										
5										
6										
7										
8										
9										
10										
11										

Compaction Equipment:	**Vibratory**/Non-Vibratory	**Tire Roll**	**Smooth Drum**	Sheep's Foot	Jumping Jack	Other
Test Location Established by:	Grid Lines	Contractor	Survey	**Estimation**		
Test Elevation Established by:	Survey	Contractor	**Estimation**			

Remarks: Rich Silkey (RS) was onsite to perform moisture density re-testing on the filter blanket common fill. Results were given to Ron with ACA and Joe with AECOM.

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Appendix C

Rock Solid Solutions Construction Report

Memorandum

June 9, 2014

To: Moltz Constructors
Project: Continental Dam Rehabilitation Project – Hinsdale County Colorado
RE: Foundation Anchors Test Results 6-8-14- Project # 2014-012

Mr. Thomas Moltz,

In accordance with the Project Specifications Section 02490 Drilled Anchors, Rock Solid Solutions installed 45 Foundation Anchors in the upper spillway slab during the first week of June 2014. The specifications (attached) 3.3 Field Testing require the foundation anchors to be tested *"not less than 48 hours and not more than 72 hours after grouting"*. Therefore, field testing was conducted Sunday 6-8-14 on 10 of the Foundation Anchors installed.

The test load was specified to be *"50% of the specified minimum yield strength"* of the specified *"Grade 60, standard deformed bar"* that as indicated in the drawings was to have a minimum size of a #8 bar. Therefore, the Test load on the foundation anchors was mandated to be 30 kips.

Rock Solid tested 10 anchors selected by the Engineer, tests 1-6 were conducted on Foundation Anchors just prior to reaching 72 hour grout strength and tests 7 - 10 were conducted on anchors that had just reached the 48 hour grout strength. The test locations are shown on the attached plan sheet and all were installed in soil. All 10 anchors were loaded by the RSS 60-ton Hydraulic ram, Power Team pump and gauge system in the presence of the on-site URS Engineer Mr. Joe Owen and the Moltz Construction representative. The May 21, 2014 calibration data for the Testing system used is attached for your information.

195 Lodgepole Circle, Parachute, CO 81635
Office: (970) 987-4247 Fax: (970) 712-5715

Results of the testing indicated that all 10 Foundation Anchors installed in soil resisted the test load for the minimum 5 min hold period.

Rock Solid is confident that the means and methods utilized for installation of the Spillway Foundation Anchors will achieve the desired design loads for the project. RSS appreciates the opportunity to work with the design and construction team of URS and Moltz. Please call/email if any questions.

Respectfully,





Patrick Breagy
Project Manager
Rock Solid Solutions
(970) 903-3028

Donald J. Berger, P.E
Project Engineer
Rock Solid Solutions
(970) 987-2743



Loading of Test #7, Note Gauge Pressure of 2,500 psi (30 Kips)





Foundation Slab Drain Excavation, Note Slab Thickness and amount of Reinforcement

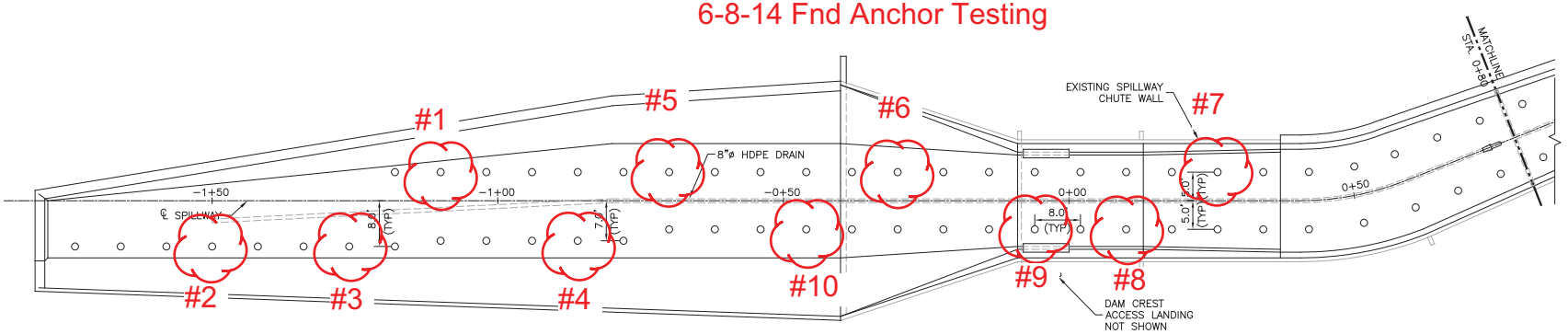


Foundation Anchors installed in the Upper Spillway area

HUNTER, PAUL R, 2/13/2014 3:58 PM

DRAWING PATH: N:\Projects\22241248_Santa_Maria_Contine\Sub_00\9.0_Constr_Design\Plan_Sheets\Spillway-Seepage\Continental Dam_S-10_Spillway Anchors.dwg

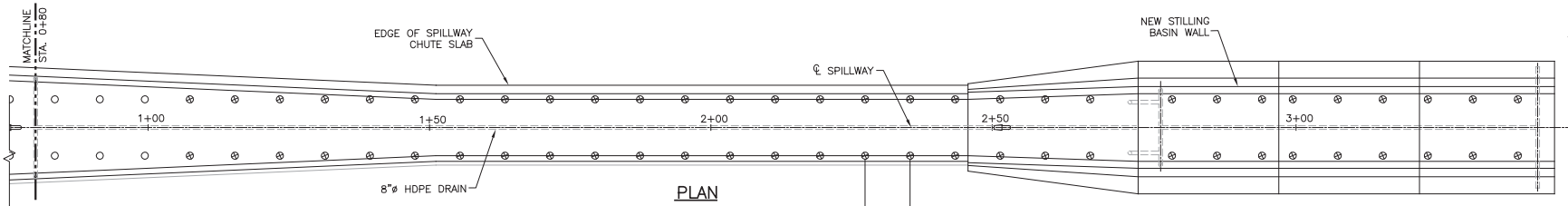
6-8-14 Fnd Anchor Testing



PLAN

0 10 20 30

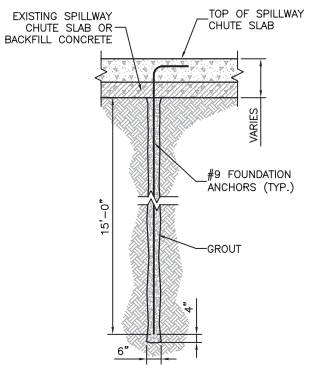
SCALE IN FEET



PLAN

0 10 20 30

SCALE IN FEET

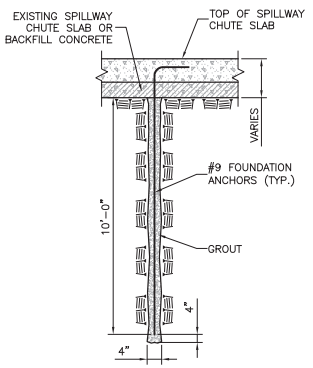


FOUNDATION ANCHOR DETAIL 1 (S-10)

STA. −1+75 TO STA. 1+05

0 2 4 8

SCALE IN FEET

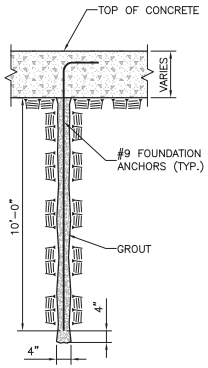


FOUNDATION ANCHOR DETAIL 2 (S-10)

STA. 1+05 TO STA. 2+50

0 2 4 8

SCALE IN FEET



FOUNDATION ANCHOR DETAIL 3 (S-10)

STA. 2+50 TO STA. 3+22

0 2 4 8

SCALE IN FEET

LEGEND

○ #9 FOUNDATION ANCHOR EMBEDDED 15'−0" INTO SOIL

⊗ #9 FOUNDATION ANCHOR EMBEDDED 10'−0" INTO BEDROCK

NOTES:

1. CONTRACTOR SHALL COORDINATE THE LOCATIONS OF ALL FOUNDATION ANCHORS WITH THE DRAIN SYSTEM AND ALL JOINTS. FINAL LOCATIONS OF ALL FOUNDATION ANCHOR SHALL BE APPROVED BY THE ENGINEER.
2. THE LOCATION OF BEDROCK CONTACT IS APPROXIMATELY AT STA. 1+05. THE LOCATION OF THE TRANSITION FROM FOUNDATION ANCHORS INSTALLED INTO SOIL VS. FOUNDATION ANCHORS INSTALLED INTO ROCK WILL BE DETERMINED BY THE ENGINEER.
3. REINFORCEMENT NOT SHOWN IN FOUNDATION ANCHOR DETAILS.

SEO FILE NO. C-259C

URS
URS Center
8181 East Tufts Avenue
Denver, Co. 80237-2637
303-694-2770 (phone)
303-694-3946 (fax)

SANTA MARIA RESERVOIR COMPANY

CONTINENTAL DAM REHABILITATION

COLORADO REGISTERED LEWIS A. TURNER 27078 PROFESSIONAL ENGINEER 12/3/14

ISSUED FOR BIDDING — DATE — BY

ISSUED FOR CONSTRUCTION — DATE — BY

REVISIONS

NO.	DESCRIPTION	DATE
△		
△		
△		
△		
△		

URS PROJECT NO:	22241248
DRAWN BY:	WDH
DESIGNED BY:	CJW
CHECKED BY:	CBG
DATE CREATED:	12/2011
PLOT DATE:	12/2011
SCALE:	AS SHOWN
ACAD VER:	2012

DRAWING TITLE

SPILLWAY FOUNDATION ANCHOR PLAN AND DETAILS

S-11

SHEET 26 OF 34

CTL | THOMPSON INCORPORATED

May 21, 2014

Rock Solid Solutions
195 Lodgepole Circle
Parachute, CO 81635

Attention: Mr. Don Berger

Subject: Hydraulic Ram Calibration
60-Ton Ram System
Project No. GS05650-435

This letter presents results of a load calibration performed on a hydraulic system delivered to our laboratory on May 19, 2014. The equipment consisted of a 60-ton hydraulic ram, Power Team pump, and two gauges. The system was calibrated using our Forney compression-testing machine with a load capacity of 400,000 pounds. Calibration of our test machine is performed annually and is traceable to the N.I.S.T.

Gauge pressure and the corresponding load were measured three times over the load range for the hydraulic ram system. The other gauge was placed in the system and the calibration repeated. The results were averaged to determine a linear equation for the load in pounds versus gauge pressure in psi. The results of the calibration are presented numerically in Tables I and II. Graphs presenting load versus gauge pressure are presented in Figures 1 and 2.

If you have questions regarding this letter, please feel free to contact us.

Very truly yours,

CTL/THOMPSON, INC.

Dan Downing
Laboratory/Field Manager

Reviewed by:

Edward R. White, P.E.
Project Engineer

DD:ERW:cd

cc: Via email to dberger@rocksolidblasting.com

234 Center Drive | Glenwood Springs, Colorado 81601
Telephone: 970-945-2809 Fax: 970-945-7411

TABLE I
CALIBRATION DATA FOR HYDRAULIC RAM SYSTEM

Client:	Rock Solid Solutions
Calibration Date:	May 20, 2014
Ram I.D.:	60-Ton
Gauge I.D.:	10,000 psi (No. 1)
Pump I.D.:	Power Team # 0901AR79126

Gauge Pressure, psi	Average Load, lbs
1,000	8,500
2,000	20,833
3,000	33,167
4,000	46,167
5,000	58,000
6,000	70,500
7,000	82,833
8,000	95,000
9,000	107,333

TABLE II
CALIBRATION DATA FOR HYDRAULIC RAM SYSTEM

Client:	Rock Solid Solutions
Calibration Date:	May 20, 2014
Ram I.D.:	60-Ton
Gauge I.D.:	10,000 psi (No. 2)
Pump I.D.:	Power Team # 0901AR79126

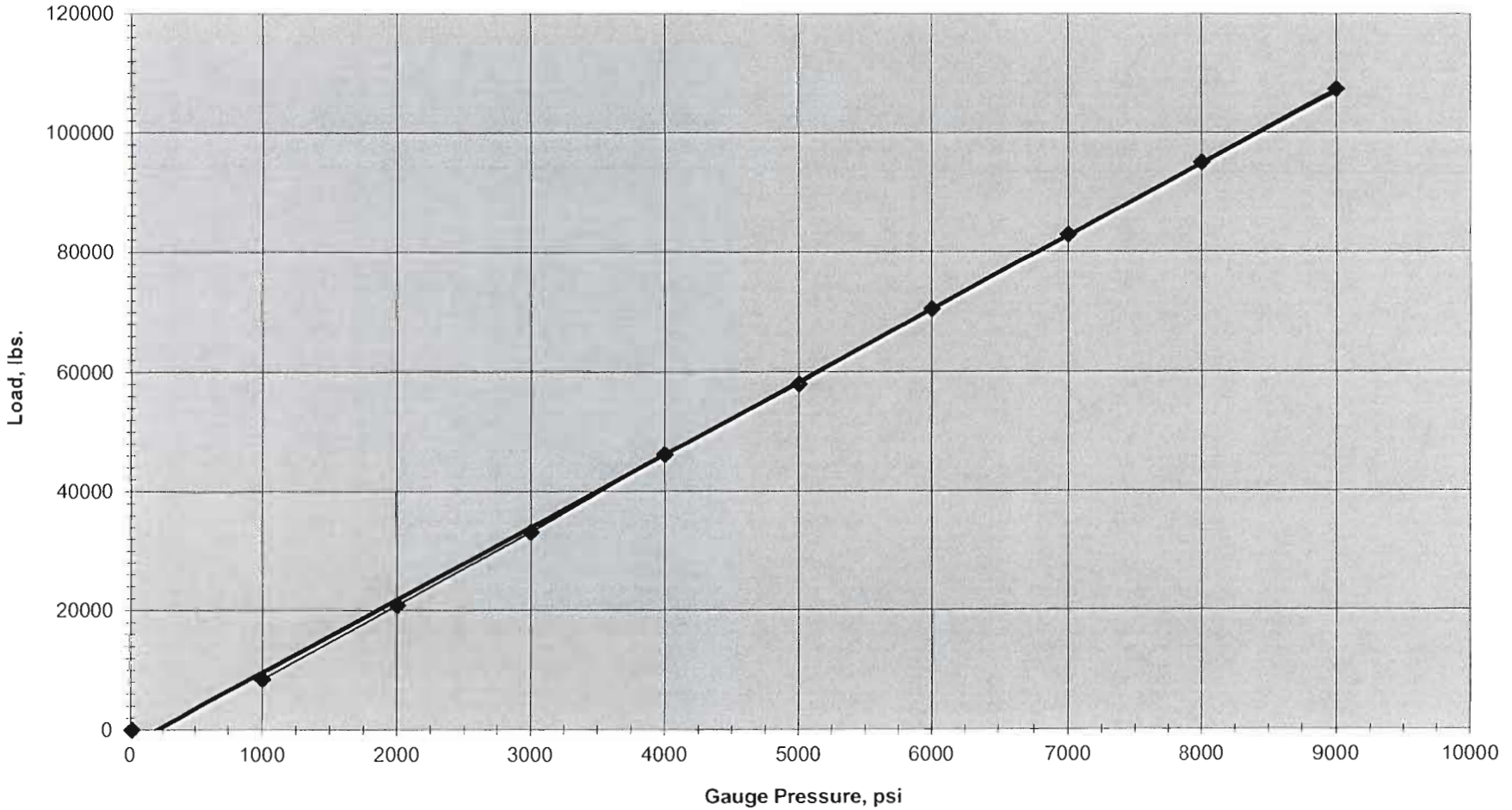
Gauge Pressure, psi	Average Load, lbs
1,000	11,333
2,000	23,167
3,000	36,833
4,000	49,167
5,000	61,333
6,000	75,000
7,000	87,167
8,000	99,167
9,000	112,000

FIGURE 1

HYDRAULIC RAM CALIBRATION

Load = 12.4(gauge pressure) - 3755
Gauge Pressure, PSI = (0.081 x Load, lbs) + 304

CTL | THOMPSON



Ram I.D.:60-Ton
Pump I.D.: Power Team # 0901AR79126
Gauge I.D.: 10,000 psi (No. 1)

Rock Solid Soltuions

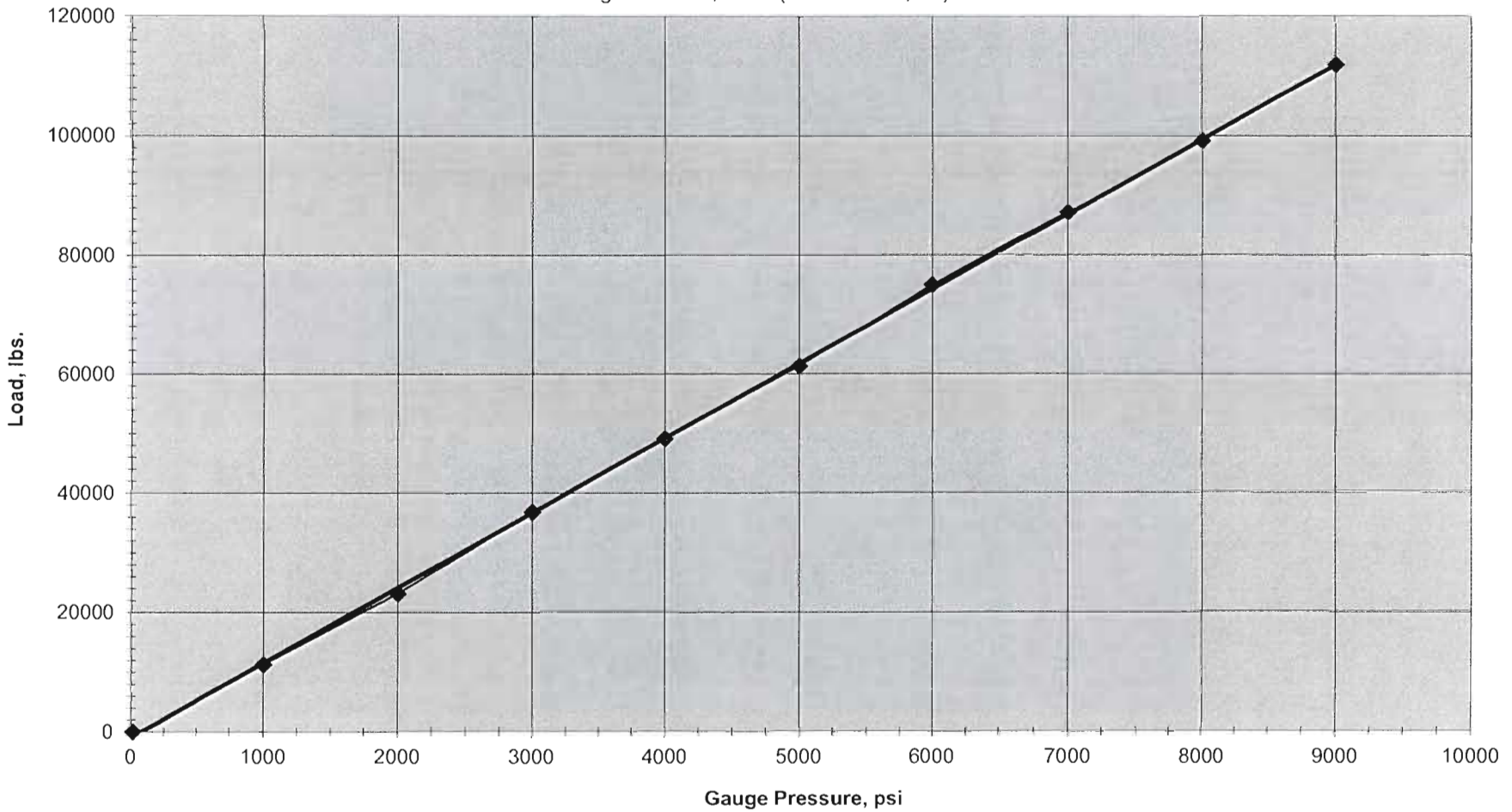
Calibration Date: May 20, 2014
Project No.: GS05650-435

FIGURE 2

HYDRAULIC RAM CALIBRATION

CTL|THOMPSON

Load = 12.6(gauge pressure) - 1412
Gauge Pressure, PSI = (0.079 x Load, lbs) + 113



Ram I.D.:60-Ton
Pump I.D.: Power Team # 0901AR79126
Gauge I.D.: 10,000 psi (No. 2)

Rock Solid Soltuions

Calibration Date: May 20, 2014
Project No.: GS05650-435

DRILL • BLAST • STABILIZATION • SCALING

ROCK SOLID
SOLUTIONS

DESIGN • BUILD

Memorandum

July 25, 2014

To: Moltz Constructors
Project: Continental Dam Rehabilitation Project – Hinsdale County Colorado
RE: Wall Anchors Test Results 6-20 thru 7-11-14- Project # 2014-012

Mr. Thomas Moltz,

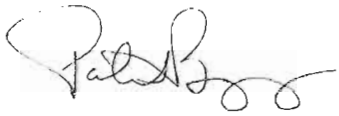
In accordance with the Project Specifications Section 02495 Temporary Wall Anchors, Rock Solid Solutions installed the Wall Anchors in the spillway training walls. The specifications 3.1 Verification Testing require that two (2) wall anchors to be verification tested and Section 3.4 Proof Testing Production Anchors requires 10% of the wall anchors be tested. Therefore, field testing was conducted throughout the work between 6-20-14 and 7-11-14 on the wall anchors. The test location map and test data sheets are attached for your records.

The test load was specified to be 6,000 lbs as indicated in the drawings and was to have a minimum size of a 1 ¼" dia bar. Rock Solid conducted three (3) Verification Tests and Proof Tested 19 wall anchors selected by the Engineer. The test locations are shown on the attached plan sheet and all were installed in soil. All wall anchors were loaded by the RSS 60-ton Hydraulic ram, Power Team pump and gauge system in the presence of the on-site URS Engineer Mr. Joe Owen or Mr. Pablo Virreira and the Moltz Construction representative. The May 21, 2014 calibration data provided with the June 9, 2014 Foundation Anchor Test results memorandum was used for the wall anchor tests as well. Results of the testing indicated that all wall anchors installed in soil and rock resisted the test load in accordance with the project specifications.

195 Lodgepole Circle, Parachute, CO 81635
Office: (970) 987-4247 Fax: (970) 712-5715

Rock Solid is confident that the means and methods utilized for installation of the Spillway Wall Anchors will achieve the desired design loads for the project. RSS appreciates the opportunity to work with the design and construction team of URS and Moltz. Please call/email if any questions.

Respectfully,





Patrick Breagy
Project Manager
Rock Solid Solutions
(970) 903-3028

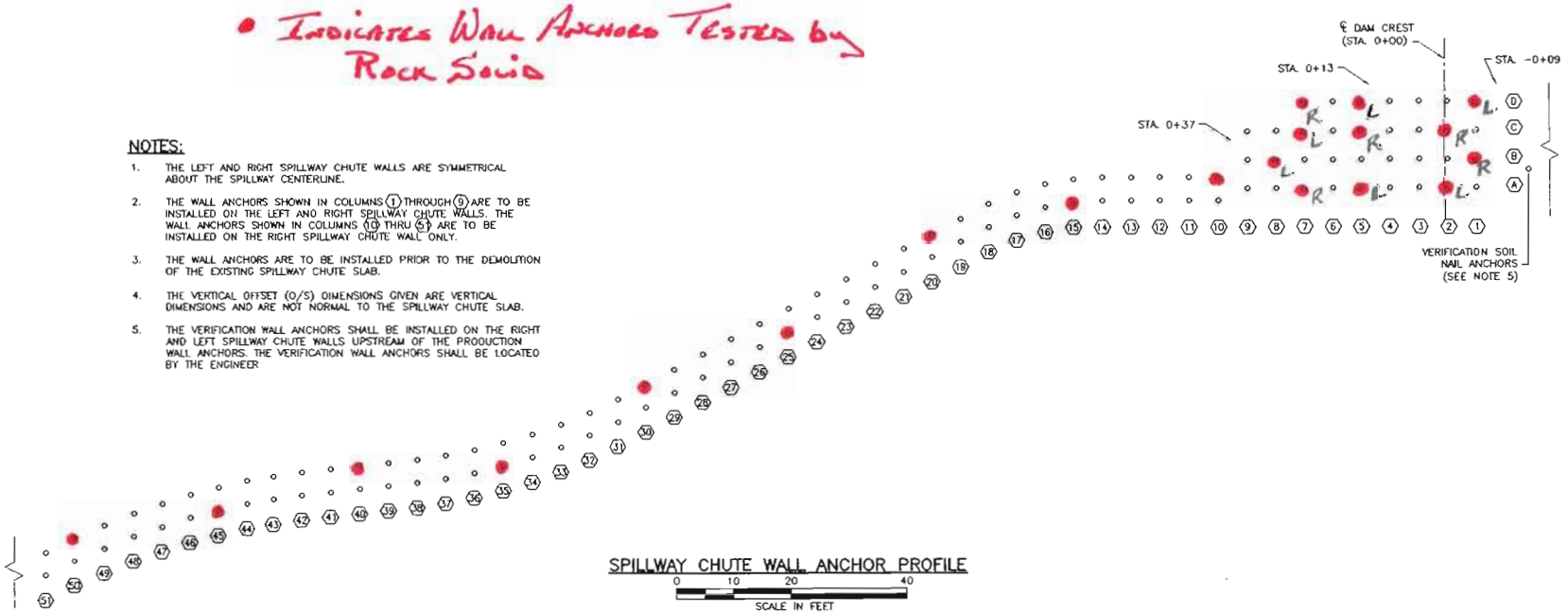
Donald J. Berger, P.E
Project Engineer
Rock Solid Solutions
(970) 987-2743

Continental Dam

• Indicates Wall Anchors Tested by Rock Solid

NOTES:

1. THE LEFT AND RIGHT SPILLWAY CHUTE WALLS ARE SYMMETRICAL ABOUT THE SPILLWAY CENTERLINE.
2. THE WALL ANCHORS SHOWN IN COLUMNS (1) THROUGH (9) ARE TO BE INSTALLED ON THE LEFT AND RIGHT SPILLWAY CHUTE WALLS. THE WALL ANCHORS SHOWN IN COLUMNS (10) THRU (51) ARE TO BE INSTALLED ON THE RIGHT SPILLWAY CHUTE WALL ONLY.
3. THE WALL ANCHORS ARE TO BE INSTALLED PRIOR TO THE DEMOLITION OF THE EXISTING SPILLWAY CHUTE SLAB.
4. THE VERTICAL OFFSET (O/S) DIMENSIONS GIVEN ARE VERTICAL DIMENSIONS AND ARE NOT NORMAL TO THE SPILLWAY CHUTE SLAB.
5. THE VERIFICATION WALL ANCHORS SHALL BE INSTALLED ON THE RIGHT AND LEFT SPILLWAY CHUTE WALLS UPSTREAM OF THE PRODUCTION WALL ANCHORS. THE VERIFICATION WALL ANCHORS SHALL BE LOCATED BY THE ENGINEER



SPILLWAY CHUTE WALL ANCHOR PROFILE

0 10 20 40

SCALE IN FEET

SPILLWAY CHUTE WALL ANCHOR SCHEDULE

ANCHOR	℄ STATION	VERT. O/S	ANCHOR	℄ STATION	VERT. O/S	ANCHOR	℄ STATION	VERT. O/S	ANCHOR	℄ STATION	VERT. O/S	ANCHOR	℄ STATION	VERT. O/S	ANCHOR	℄ STATION	VERT. O/S
1A	-0+05.50	3.0'	5D	0+14.50	18.0'	14A	0+59.50	0.5'	23B	1+04.50	4.5'	33A	1+54.50	0.5'	42B	1+99.50	4.5'
1B	-0+05.50	8.0'	6A	0+19.50	3.0'	14B	0+59.50	4.5'	24A	1+09.50	0.5'	33B	1+54.50	4.5'	43A	2+04.50	0.5'
1C	-0+05.50	13.0'	6B	0+19.50	8.0'	15A	0+64.50	0.5'	24B	1+09.50	4.5'	34A	1+59.50	0.5'	43B	2+04.50	4.5'
1D	-0+05.50	18.0'	6C	0+19.50	13.0'	15B	0+64.50	4.5'	25A	1+14.50	0.5'	34B	1+59.50	4.5'	44A	2+09.50	0.5'
2A	-0+00.50	3.0'	7A	0+24.50	3.0'	16A	0+69.50	0.5'	25B	1+14.50	4.5'	35A	1+64.50	0.5'	44B	2+09.50	4.5'
2B	-0+00.50	8.0'	7B	0+24.50	8.0'	16B	0+69.50	4.5'	26A	1+19.50	0.5'	35B	1+64.50	4.5'	45A	2+14.50	0.5'
2C	-0+00.50	13.0'	7C	0+24.50	13.0'	17A	0+74.50	0.5'	26B	1+19.50	4.5'	36A	1+69.50	0.5'	45B	2+14.50	4.5'
2D	-0+00.50	18.0'	8A	0+29.50	3.0'	17B	0+74.50	4.5'	27A	1+24.50	0.5'	36B	1+69.50	4.5'	46A	2+19.50	0.5'
3A	0+04.50	3.0'	8B	0+29.50	8.0'	18A	0+79.50	0.5'	27B	1+24.50	4.5'	37A	1+74.50	0.5'	46B	2+19.50	4.5'
3B	0+04.50	8.0'	9A	0+34.50	3.0'	18B	0+79.50	4.5'	28A	1+29.50	0.5'	37B	1+74.50	4.5'	47A	2+24.50	0.5'
3C	0+04.50	13.0'	9B	0+34.50	8.0'	19A	0+84.50	0.5'	28B	1+29.50	4.5'	38A	1+79.50	0.5'	47B	2+24.50	4.5'
3D	0+04.50	18.0'	10A	0+39.50	0.5'	19B	0+84.50	4.5'	29A	1+34.50	0.5'	38B	1+79.50	4.5'	48A	2+29.50	0.5'
4A	0+09.50	3.0'	10B	0+39.50	4.5'	20A	0+89.50	0.5'	29B	1+34.50	4.5'	39A	1+84.50	0.5'	48B	2+29.50	4.5'
4B	0+09.50	8.0'	11A	0+44.50	0.5'	20B	0+89.50	4.5'	30A	1+39.50	0.5'	39B	1+84.50	4.5'	49A	2+34.50	0.5'
4C	0+09.50	13.0'	11B	0+44.50	4.5'	21A	0+94.50	0.5'	30B	1+39.50	4.5'	40A	1+89.50	0.5'	49B	2+34.50	4.5'
4D	0+09.50	18.0'	12A	0+49.50	0.5'	21B	0+94.50	4.5'	31A	1+44.50	0.5'	40B	1+89.50	4.5'	50A	2+39.50	0.5'
5A	0+14.50	3.0'	12B	0+49.50	4.5'	22A	0+99.50	0.5'	31B	1+44.50	4.5'	41A	1+94.50	0.5'	50B	2+39.50	4.5'
5B	0+14.50	8.0'	13A	0+54.50	0.5'	22B	0+99.50	4.5'	32A	1+49.50	0.5'	41B	1+94.50	4.5'	51A	2+44.50	0.5'
5C	0+14.50	13.0'	13B	0+54.50	4.5'	23A	1+04.50	0.5'	32B	1+49.50	4.5'	42A	1+99.50	0.5'	51B	2+44.50	4.5'

SEO FILE NO. C-259C

URS
URS Center
8181 East Tufts Avenue
Denver, Co. 80237-2637
303-694-2770 (phone)
303-694-3946 (fax)

SANTA MARIA RESERVOIR COMPANY

CONTINENTAL DAM REHABILITATION

ISSUED FOR BIDDING

ISSUED FOR CONSTRUCTION

REVISIONS

NO.	DESCRIPTION	DATE
△		
△		
△		
△		
△		

URS PROJECT NO:	22241248
DESIGNED BY:	WDH
DRAWN BY:	CJW
CHECKED BY:	CBC
DATE CREATED:	12/2011
PLOT DATE:	12/2011
SCALE:	AS SHOWN
ACAD VER:	2012

DRAWING TITLE

SPILLWAY WALL ANCHOR PROFILE AND SCHEDULE

S-13

SHEET 28 OF 34

Continental Dam Rehab
Verification Test Report - Wall Anchor

Test ID: verification test Date: 6/20/14 Tester: ROB DAVIS / PABLO

Size:

Cross-sectional area:		in^2	Bond Length (min):		ft
Total MP Length:	15	ft	Unbonded Length:		ft
Bore Hole Depth:		ft	Jack Length:		ft
Bore Hole Diameter:	4	in	Allowable Pullout Resistance:		kips/ft
Bore Hole Inclination:	15	deg	Design Test Load:		lbs

Tester's Comments:

Load Cycle	Reading Times (min)	Load Increments (%)	Load Increments (lbs)	Pressure Gauge (psi)	Dial Gauge	Movement	Elastic Movement
1							
2							
	10	0.50		350	0.376		
3	10	0.75		469	0.377		
	10	1.00		587	0.377		
	10	1.25		705	0.378		
	1	1.50		825	0.379		
	2	1.50		825	0.379		
	3	1.50		825	0.379		
	5	1.50		825	0.379		
	6	1.50		825	0.379		
	10	1.50		825	0.379		
	20	1.50		825	0.379		
	30	1.50		825	0.379		
	50	1.50		825	0.379		
	60	1.50		825	0.379		
	10	1.75		943	0.380		
	10	2.00		1061	0.381		
	10	1.75		943	0.379		
Unload	10	1.50		825	0.378		
	1	1.25		705	0.377		
	1	1.00		587	0.376		
	1	0.75		469	0.375		
	1	0.50		350	0.373		

Allowable Creep (6-60 min): _____ in

Actual Creep: _____ in

Calibration Equation:

Gauge Pressure = 0.079*Load + 113

Calibration Date: 5/22/2014

Testing Equipment:

60-ton jack RHA604D #350002,
P159D Pump Serial # 0901AR79126,
10,000psi Gauge (#2)

Wall Anchor Verification

Load	PSI	Hold time	Test 6/20/2014 Pablo
0.5	350	10m	0.376
0.75	469	10m	.376-.377
1	587	10m	0.377
1.25	705	10m	.377-.378
1.5	825	0m	0.378
		1m	0.379
		2m	0.379
		3m	0.379
		5m	0.379
		6m	0.379
		10m	0.379
		20m	0.379
		30m	0.379
		50m	0.379
		60m	0.379
1.75	943	10m	0.38
2	1061	10m	0.381
1.75	943		0.379
1.5	825		0.378
1.25	705		0.377
1	587		0.376
0.75	469		0.376
0.5	350		0.373

LEFT A-2

Continental Dam Rehab
Verification Test Report - Wall Anchor

Test ID: verification test Date: 6/20/14 Tester: Rob Davis / Joe

Size: 38 INJECTION

Cross-sectional area:	in^2	Bond Length (min):	15 ft
Total Length:	15 ft	Unbonded Length:	13.5" ft
Bore Hole Depth:	ft	Jack Length:	ft
Bore Hole Diameter:	4 in	Allowable Pullout Resistance:	kips/ft
Bore Hole Inclination:	15 deg	Design Test Load:	lbs

Tester's Comments:

Load Cycle	Reading Times (min)	Load Increments (%)	Load Increments (lbs)	Pressure Gauge (psi)	Dial Gauge	Movement	Elastic Movement
1							
2							
				350	0.248		
	10	0.50		350	0.246		
3	10	0.75		469	0.246		
	10	1.00		587	0.247		
	10	1.25		705	0.248		
	1	1.50		825	0.249		
	2	1.50		825	0.249		
	3	1.50		825	0.249		
	5	1.50		825	0.249		
	6	1.50		825	0.249		
	10	1.50		825	0.249		
	20	1.50		825	0.249		
	30	1.50		825	0.250		
	50	1.50		825	0.250		
	60	1.50		825	0.252		
	10	1.75		943	0.253		
	10	2.00		1061	0.255		
	10	1.75		943	0.253		
Unload	10	1.50		825	0.252		
	1	1.25		705	0.251		
	1	1.00		587	0.251		
	1	0.75		469	0.250		
	1	0.50		350	0.250		

Allowable Creep (6-60 min): _____ in

Actual Creep: _____ in

Calibration Equation:

Gauge Pressure = 0.079*Load + 113

Calibration Date: 5/22/2014

Testing Equipment:

60-ton jack RHA604D #350002,
P159D Pump Serial # 0901AR79126,
10,000psi Gauge (#2)

Wall Anchor Proof Test

Inspector			Pable	Aaron	Aaron
Date			6/20/2014	6/20/2014	6/20/2014
Load	PSI	Hold time	Test#1	Test#2	Test#3
			RD7	RC2	LD5
0.5	350	U.S.	0.352	0.355	0.227
0.75	469	U.S.	0.353	0.358	0.231
1	587	U.S.	0.373	0.36	0.239
1.25	705	U.S.	0.39	0.362	0.244
1.5	825		0.418	0.365	0.25
		1m	0.418	0.365	0.251
		2m	0.418	0.365	0.251
		3m	0.418	0.365	0.251
		5m	0.418	0.365	0.252
		6m	0.418	0.365	0.252
		10m	0.418	0.366	0.253
		20m			
		30m			
		50m			
		60m			

Continental
Proof Test Report

Test ID: proof test Date: 6/26/14 Tester: ROB DAVIS

Size: RC5

Cross-sectional area:	in^2	Bond Length (min):	ft
Total Length:	ft	Unbonded Length:	ft
Bore Hole Depth: 15	ft	Jack Length:	ft
Bore Hole Diameter: 4	in	Allowable Pullout Resistance:	psi
Bore Hole Inclination: 15	deg	Design Test Load:	lbs

Tester's Comments:

Load Cycle	Reading Times (min)	Load Increments (%)	Load Increments (lbs)	Pressure Gauge (psi)	Dial Gauge 1	Movement	Elastic Movement
	1	AL					
Load	0	0.25					
	0	0.50		350	0.352		
	0	0.75		469	0.353		
	0	1.00		587	0.373		
	0	1.25		705	0.390		
	0	1.50		825	0.418		
	1	1.50		825	0.418		
	2	1.50		825	0.418		
	3	1.50		825	0.418		
	5	1.50		825	0.418		
	6	1.50		825	0.418		
	10	1.50		825	0.418		
Unload	0	AL					

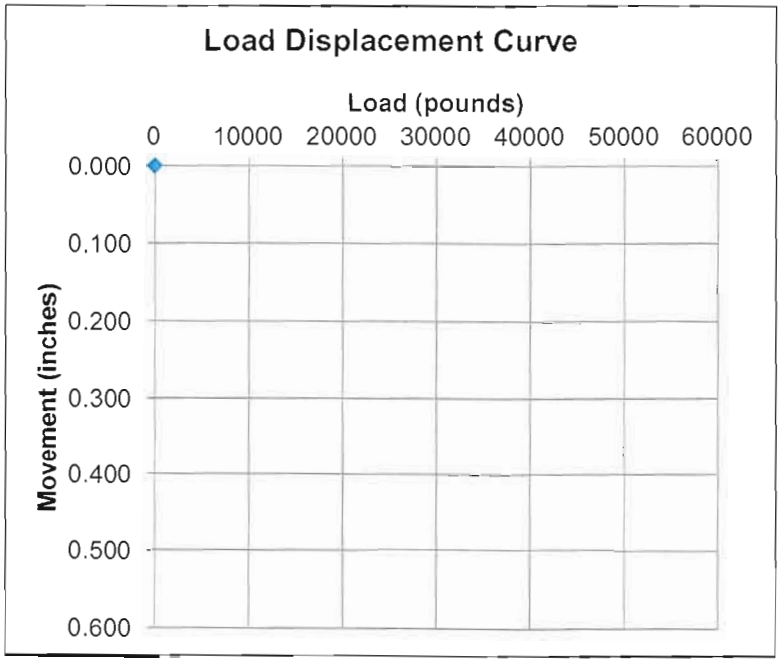
Allowable Creep (1-10 min): _____ in
Actual Creep: _____ in

Stiffness: _____ kips/in

Calibration Equation:
Gauge Pressure = 0.079*Load + 113

Calibration Date: 5/22/2014

Testing Equipment:
60-ton jack RHA604D #350002,
P159D Pump Serial # 0901AR79126,
10,000psi Gauge (#2)



Continental

Proof Test Report

Test ID: proof test Date: 6/20/14 Tester: Rob Davis

Size: LC7

Cross-sectional area:	in^2	Bond Length (min):	ft
Total Length:	ft	Unbonded Length:	ft
Bore Hole Depth: 15	ft	Jack Length:	ft
Bore Hole Diameter: 4	in	Allowable Pullout Resistance:	psi
Bore Hole Inclination: 15	deg	Design Test Load:	lbs

Tester's Comments:

Load Cycle	Reading Times (min)	Load Increments (%)	Load Increments (lbs)	Pressure Gauge (psi)	Dial Gauge 1	Movement	Elastic Movement
	1	AL					
Load	0	0.25					
	0	0.50		350	0.355		
	0	0.75		469	0.358		
	0	1.00		587	0.360		
	0	1.25		705	0.362		
	0	1.50		825	0.365		
	1	1.50		825	0.365		
	2	1.50		825	0.365		
	3	1.50		825	0.365		
	5	1.50		825	0.365		
	6	1.50		825	0.365		
	10	1.50		825	0.366		
Unload	0	AL					

Allowable Creep (1-10 min): _____ in

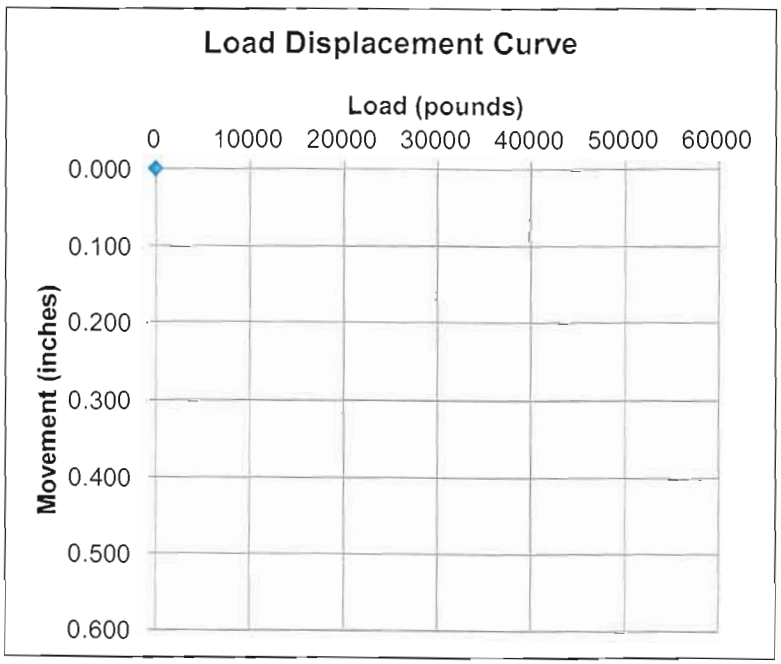
Actual Creep: _____ in

Stiffness: _____ kips/in

Calibration Equation:
Gauge Pressure = 0.079*Load + 113

Calibration Date: 5/22/2014

Testing Equipment:
60-ton jack RHA604D #350002,
P159D Pump Serial # 0901AR79126,
10,000psi Gauge (#2)



Continental
Proof Test Report

Test ID: proof test LD1 Date: 6/30/14 Tester: Davis

Size: 38 INJECTION

Cross-sectional area:	____ in^2	Bond Length (min):	____ ft
Total Length:	____ ft	Unbonded Length:	____ ft
Bore Hole Depth:	____ ft	Jack Length:	____ ft
Bore Hole Diameter:	____ in	Allowable Pullout Resistance:	____ psi
Bore Hole Inclination:	____ deg	Design Test Load:	____ lbs

Tester's Comments:

Load Cycle	Reading Times (min)	Load Increments (%)	Load Increments (lbs)	Pressure Gauge (psi)	Dial Gauge 1	Movement	Elastic Movement
	1	AL					
Load	0	0.25					
	0	0.50		350	0.227		
	0	0.75		469	0.231		
	0	1.00		587	0.239		
	0	1.25		705	0.244		
	0	1.50		825	0.250		
	1	1.50		825	0.251		
	2	1.50		825	0.251		
	3	1.50		825	0.251		
	5	1.50		825	0.252		
	6	1.50		825	0.252		
	10	1.50		825	0.253		
Unload	0	AL					

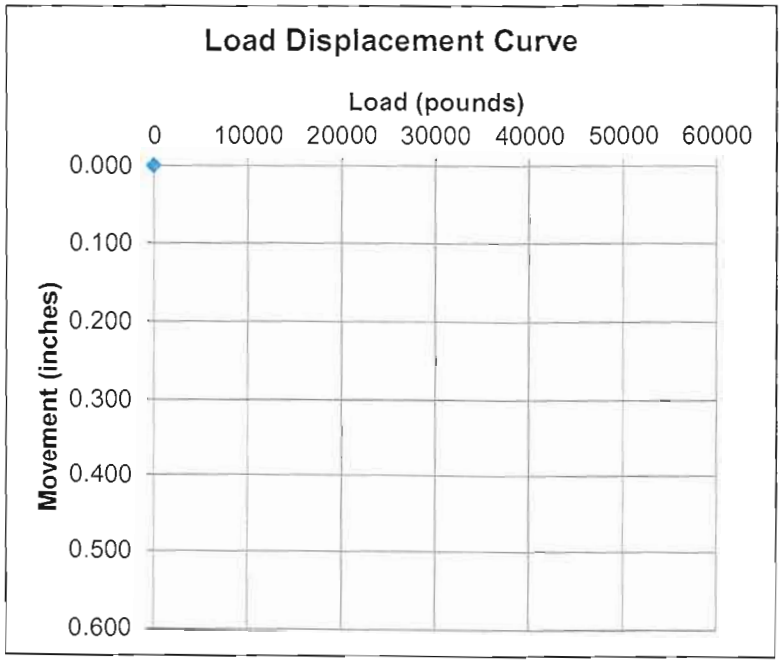
Allowable Creep (1-10 min): ____ in
Actual Creep: ____ in

Stiffness: ____ kips/in

Calibration Equation:
Gauge Pressure = 0.079*Load + 113

Calibration Date: 5/22/2014

Testing Equipment:
60-ton jack RHA604D #350002,
P159D Pump Serial # 0901AR79126,
10,000psi Gauge (#2)



RIGHT NB

Continental
Proof Test Report

Test ID: proof test Date: 6/30/14 Tester: ROB DAVIS / JOE

Size: 38 INJECTION

Cross-sectional area:	____ in^2	Bond Length (min):	____ ft
Total Length:	____ ft	Unbonded Length:	14" ft
Bore Hole Depth:	15 ft	Jack Length:	____ ft
Bore Hole Diameter:	4 in	Allowable Pullout Resistance:	____ psi
Bore Hole Inclination:	15 deg	Design Test Load:	____ lbs

Tester's Comments:

Load Cycle	Reading Times (min)	Load Increments (%)	Load Increments (lbs)	Pressure Gauge (psi)	Dial Gauge 1	Movement	Elastic Movement
	1	AL					
Load	0	0.25					
	0	0.50		350	1.225		
	0	0.75		469	1.237		
	0	1.00		587	1.242		
	0	1.25		705	1.246		
	0	1.50		825	1.250		
	1	1.50		825	1.250		
	2	1.50		825	1.250		
	3	1.50		825	1.250		
	5	1.50		825	1.250		
	6	1.50		825	1.250		
	10	1.50		825	1.252		
Unload	0	AL					

Allowable Creep (1-10 min): ____ in

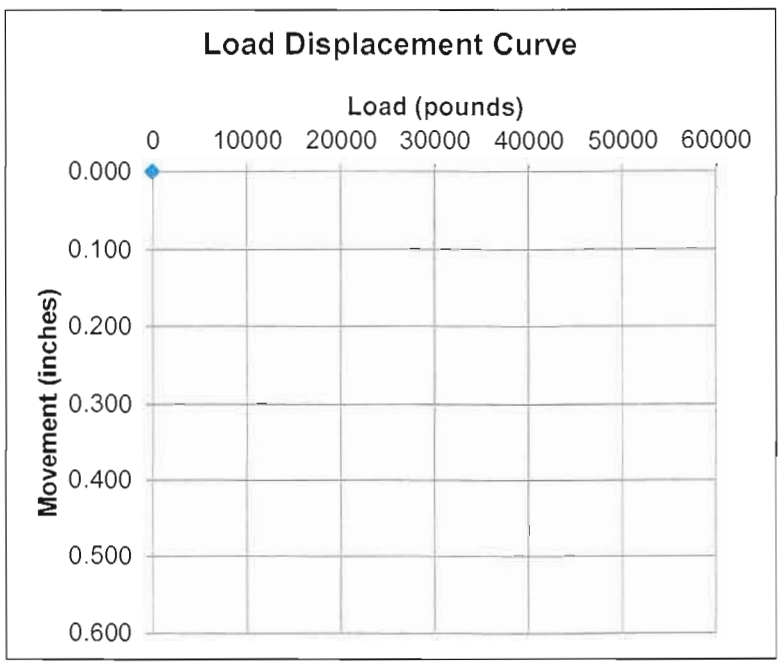
Actual Creep: ____ in

Stiffness: ____ kips/in

Calibration Equation:
Gauge Pressure = 0.079*Load + 113

Calibration Date: 5/22/2014

Testing Equipment:
60-ton jack RHA604D #350002,
P159D Pump Serial # 0901AR79126,
10,000psi Gauge (#2)



KIGHT 15 F

Continental
Proof Test Report

Test ID: proof test Date: 6/30/ Tester: Rob Davis / JOE

Size: 38 INJECTION

Cross-sectional area:	____ in^2	Bond Length (min):	____ ft
Total Length:	____ ft	Unbonded Length:	13'' ~~ft~~
Bore Hole Depth:	15 ft	Jack Length:	____ ft
Bore Hole Diameter:	4 in	Allowable Pullout Resistance:	____ psi
Bore Hole Inclination:	15 deg	Design Test Load:	____ lbs

Tester's Comments:

Load Cycle	Reading Times (min)	Load Increments (%)	Load Increments (lbs)	Pressure Gauge (psi)	Dial Gauge 1	Movement	Elastic Movement
	1	AL					
Load	0	0.25					
	0	0.50		350	0.388		
	0	0.75		469	0.389		
	0	1.00		587	0.390		
	0	1.25		705	0.391		
	0	1.50		825	0.394		
	1	1.50		825	0.394		
	2	1.50		825	0.394		
	3	1.50		825	0.395		
	5	1.50		825	0.395		
	6	1.50		825	0.395		
	10	1.50		825	0.395		
Unload	0	AL					

Allowable Creep (1-10 min): ____ in

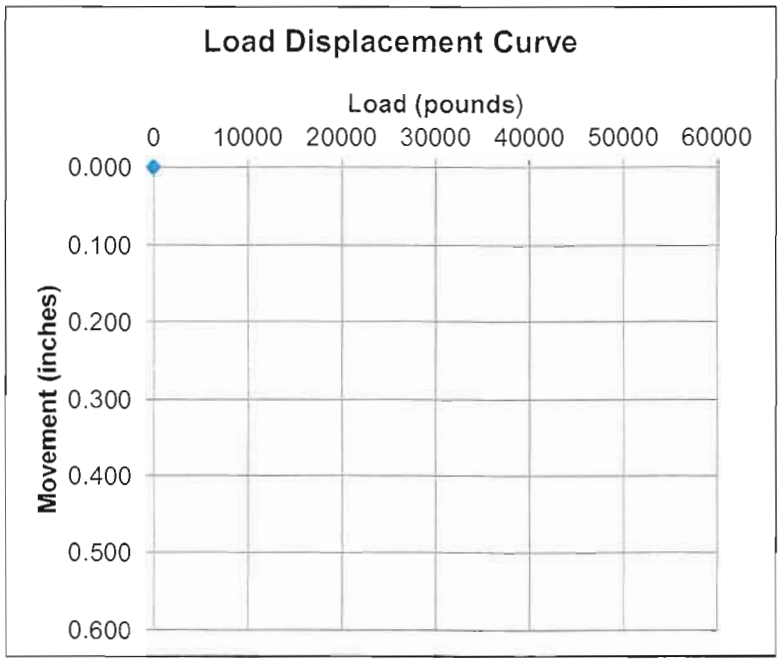
Actual Creep: ____ in

Stiffness: ____ kips/in

Calibration Equation:
Gauge Pressure = 0.079*Load + 113

Calibration Date: 5/22/2014

Testing Equipment:
60-ton jack RHA604D #350002,
P159D Pump Serial # 0901AR79126,
10,000psi Gauge (#2)



RIGHT 20B

Continental
Proof Test Report

Test ID: proof test Date: 6/30/14 Tester: ROB DAVIS / JOE

Size: 38 INJECTION

Cross-sectional area:	____ in^2	Bond Length (min):	____ ft
Total Length:	____ ft	Unbonded Length:	____ ft
Bore Hole Depth:	____ ft	Jack Length:	____ ft
Bore Hole Diameter:	____ in	Allowable Pullout Resistance:	____ psi
Bore Hole Inclination:	____ deg	Design Test Load:	____ lbs

Tester's Comments:

Load Cycle	Reading Times (min)	Load Increments (%)	Load Increments (lbs)	Pressure Gauge (psi)	Dial Gauge 1	Movement	Elastic Movement
	1	AL					
Load	0	0.25					
	0	0.50		350	0.447		
	0	0.75		469	0.449		
	0	1.00		587	0.451		
	0	1.25		705	0.454		
	0	1.50		825	0.457		
	1	1.50		825	0.458		
	2	1.50		825	0.459		
	3	1.50		825	0.459		
	5	1.50		825	0.460		
	6	1.50		825	0.460		
	10	1.50		825	0.460		
Unload	0	AL					

Allowable Creep (1-10 min): ____ in

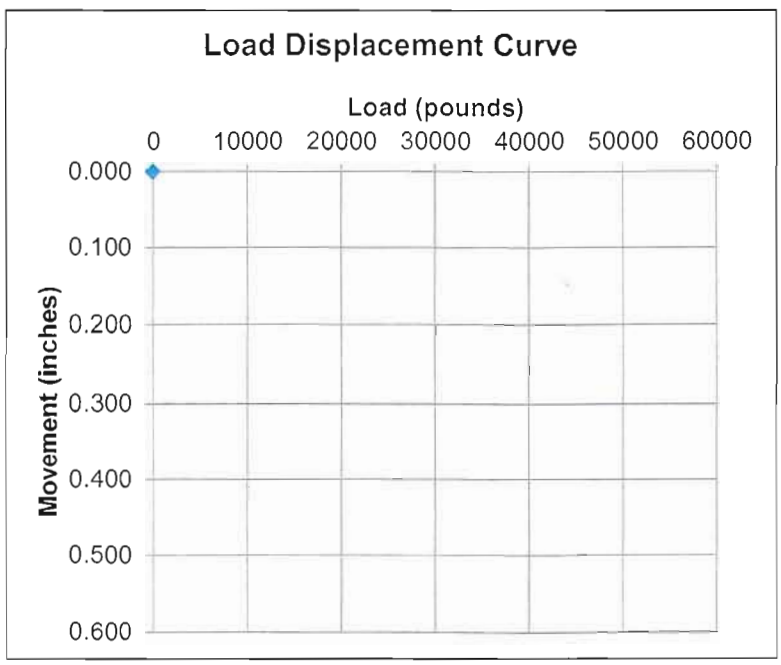
Actual Creep: ____ in

Stiffness: ____ kips/in

Calibration Equation:
Gauge Pressure = 0.079*Load + 113

Calibration Date: 5/22/2014

Testing Equipment:
60-ton jack RHA604D #350002,
P159D Pump Serial # 0901AR79126,
10,000psi Gauge (#2)



LEFT AS

Continental
Proof Test Report

Test ID: proof test Date: 6/30/14 Tester: ROB DAVIS / JOE

Size: 38 INDENTION

Cross-sectional area:	in^2	Bond Length (min):	ft
Total Length: 15	ft	Unbonded Length: 13'	ft
Bore Hole Depth:	ft	Jack Length:	ft
Bore Hole Diameter: 4	in	Allowable Pullout Resistance:	psi
Bore Hole Inclination: 15	deg	Design Test Load:	lbs

Tester's Comments:

Load Cycle	Reading Times (min)	Load Increments (%)	Load Increments (lbs)	Pressure Gauge (psi)	Dial Gauge 1	Movement	Elastic Movement
	1	AL					
Load	0	0.25					
	0	0.50		350	0.412		
	0	0.75		469	0.414		
	0	1.00		587	0.415		
	0	1.25		705	0.417		
	0	1.50		825	0.419		
	1	1.50		825	0.419		
	2	1.50		825	0.419		
	3	1.50		825	0.419		
	5	1.50		825	0.419		
	6	1.50		825	0.419		
	10	1.50		825	0.419		
Unload	0	AL					

Allowable Creep (1-10 min): _____ in

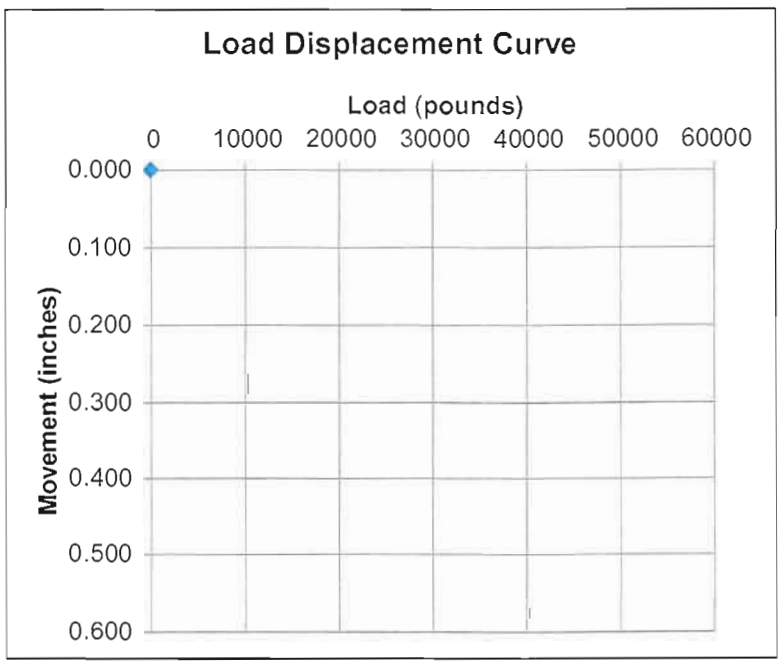
Actual Creep: _____ in

Stiffness: _____ kips/in

Calibration Equation:
Gauge Pressure = 0.079*Load + 113

Calibration Date: 5/22/2014

Testing Equipment:
60-ton jack RHA604D #350002,
P159D Pump Serial # 0901AR79126,
10,000psi Gauge (#2)



LEFT 15?

Continental
Proof Test Report

Test ID: proof test Date: 6/30/14 Tester: Rob / Dwight / Joe

Size: 38 INSERTION

Cross-sectional area:	in^2	Bond Length (min):	15 ft
Total Length:	ft	Unbonded Length:	14" ft
Bore Hole Depth:	15 ft	Jack Length:	ft
Bore Hole Diameter:	4 in	Allowable Pullout Resistance:	psi
Bore Hole Inclination:	15 deg	Design Test Load:	lbs

Tester's Comments:

Load Cycle	Reading Times (min)	Load Increments (%)	Load Increments (lbs)	Pressure Gauge (psi)	Dial Gauge 1	Movement	Elastic Movement
	1	AL					
Load	0	0.25					
	0	0.50		350	0.576		
	0	0.75		469	0.579		
	0	1.00		587	0.583		
	0	1.25		705	0.586		
	0	1.50		825	0.591		
	1	1.50		825	0.591		
	2	1.50		825	0.592		
	3	1.50		825	0.592		
	5	1.50		825	0.592		
	6	1.50		825	0.593		
	10	1.50		825	0.593		
Unload	0	AL					

Allowable Creep (1-10 min): _____ in

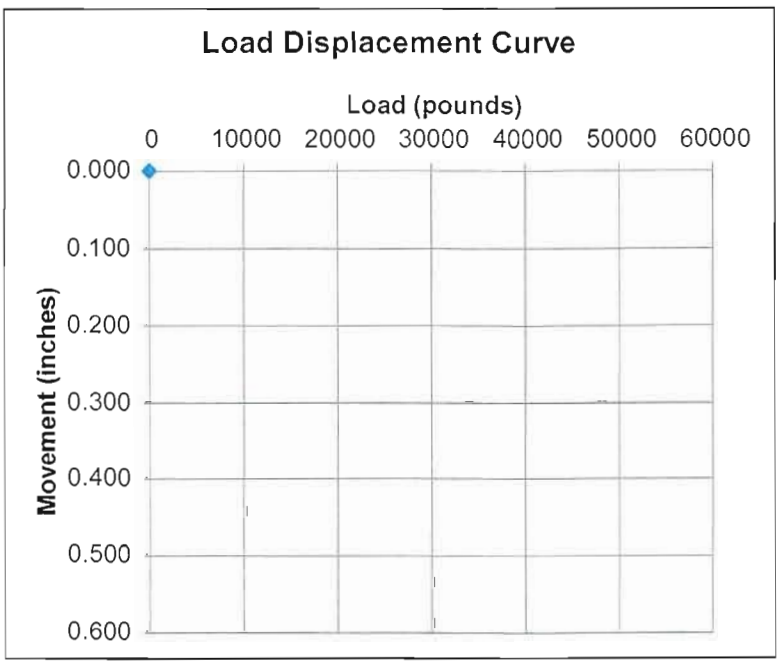
Actual Creep: _____ in

Stiffness: _____ kips/in

Calibration Equation:
Gauge Pressure = 0.079*Load + 113

Calibration Date: 5/22/2014

Testing Equipment:
60-ton jack RHA604D #350002,
P159D Pump Serial # 0901AR79126,
10,000psi Gauge (#2)



Continental

Proof Test Report

Test ID: proof test Date: 6/30/14 Tester: Roz Davis / JDE

Size: 38 INJECTION

Cross-sectional area:	in^2	Bond Length (min):	ft
Total Length:	ft	Unbonded Length:	13" ft
Bore Hole Depth:	15 ft	Jack Length:	ft
Bore Hole Diameter:	4 in	Allowable Pullout Resistance:	psi
Bore Hole Inclination:	15 deg	Design Test Load:	lbs

Tester's Comments:

Load Cycle	Reading Times (min)	Load Increments (%)	Load Increments (lbs)	Pressure Gauge (psi)	Dial Gauge 1	Movement	Elastic Movement
	1	AL					
Load	0	0.25					
	0	0.50		350	0.405		
	0	0.75		469	0.412		
	0	1.00		587	0.417		
	0	1.25		705	0.421		
	0	1.50		825	0.424		
	1	1.50		825	0.424		
	2	1.50		825	0.424		
	3	1.50		825	0.424		
	5	1.50		825	0.424		
	6	1.50		825	0.425		
	10	1.50		825	0.425		
Unload	0	AL					

Allowable Creep (1-10 min): in

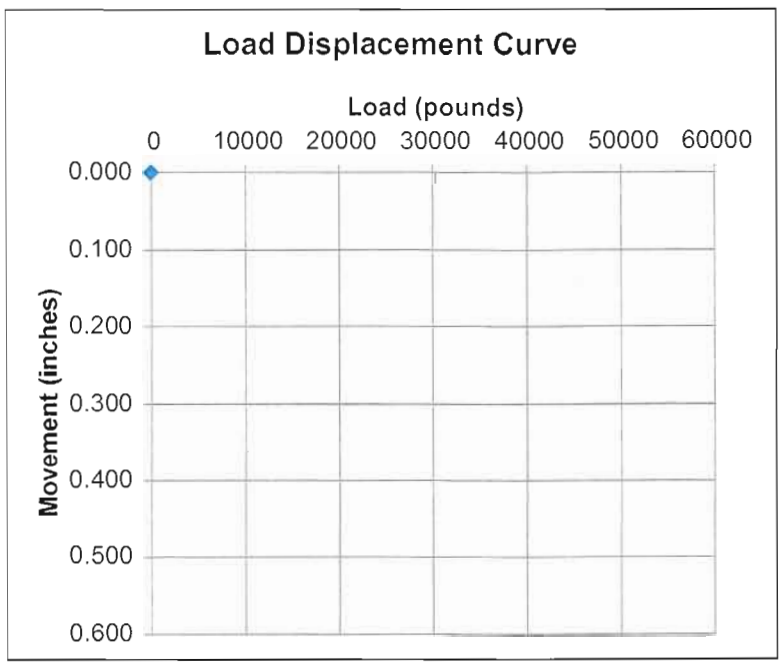
Actual Creep: in

Stiffness: kips/in

Calibration Equation:
Gauge Pressure = 0.079*Load + 113

Calibration Date: 5/22/2014

Testing Equipment:
60-ton jack RHA604D #350002,
P159D Pump Serial # 0901AR79126,
10,000psi Gauge (#2)



RIGHT A

Continental
Proof Test Report

Test ID: proof test Date: 6/30/14 Tester: ROB DAVIS / JOE

Size: 38 INJECTION

Cross-sectional area:	____ in^2	Bond Length (min):	____ ft
Total MP Length:	____ ft	Unbonded Length:	13" ft
Bore Hole Depth:	15 ft	Jack Length:	____ ft
Bore Hole Diameter:	4 in	Allowable Pullout Resistance:	____ psi
Bore Hole Inclination:	15 deg	Design Test Load:	____ lbs

Tester's Comments:

Load Cycle	Reading Times (min)	Load Increments (%)	Load Increments (lbs)	Pressure Gauge (psi)	Dial Gauge 1	Movement	Elastic Movement
	1	AL					
Load	0	0.25					
	0	0.50		350	0.570		
	0	0.75		469	0.573		
	0	1.00		587	0.575		
	0	1.25		705	0.577		
	0	1.50		825	0.579		
	1	1.50		825	0.579		
	2	1.50		825	0.579		
	3	1.50		825	0.579		
	5	1.50		825	0.580		
	6	1.50		825	0580		
	10	1.50		825	0.581		
Unload	0	AL					

Allowable Creep (1-10 min): ____ in

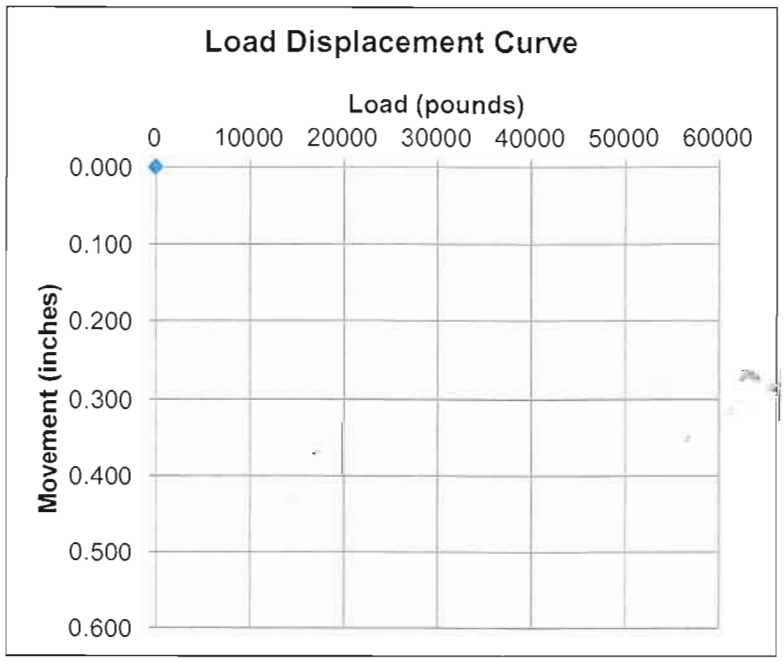
Actual Creep: ____ in

Stiffness: ____ kips/in

Calibration Equation:
Gauge Pressure = 0.079*Load + 113

Calibration Date: 5/22/2014

Testing Equipment:
60-ton jack RHA604D #350002,
P159D Pump Serial # 0901AR79126,
10,000psi Gauge (#2)



Continental
Proof Test Report

Test ID: proof test 25# Date: 7/11/14 Tester: ROBERT DAVIS / JOE

Size: #9

Cross-sectional area:	____ in^2	Bond Length (min):	____ ft
Total Length:	____ ft	Unbonded Length:	13' ft
Bore Hole Depth:	15 ft	Jack Length:	____ ft
Bore Hole Diameter:	4 in	Allowable Pullout Resistance:	____ psi
Bore Hole Inclination:	15 deg	Design Test Load:	____ lbs

Tester's Comments:

Load Cycle	Reading Times (min)	Load Increments (%)	Load Increments (lbs)	Pressure Gauge (psi)	Dial Gauge 1	Movement	Elastic Movement
	1	AL					
Load	0	0.25					
	0	0.50		350	0.502		
	0	0.75		469	0.510		
	0	1.00		587	0.515		
	0	1.25		705	0.520		
	0	1.50		825	0.525		
	1	1.50		825	0.525		
	2	1.50		825	0.525		
	3	1.50		825	0.525		
	5	1.50		825	0.525		
	6	1.50		825	0.525		
	10	1.50		825	0.528		
Unload	0	AL			0.505		

Allowable Creep (1-10 min): ____ in

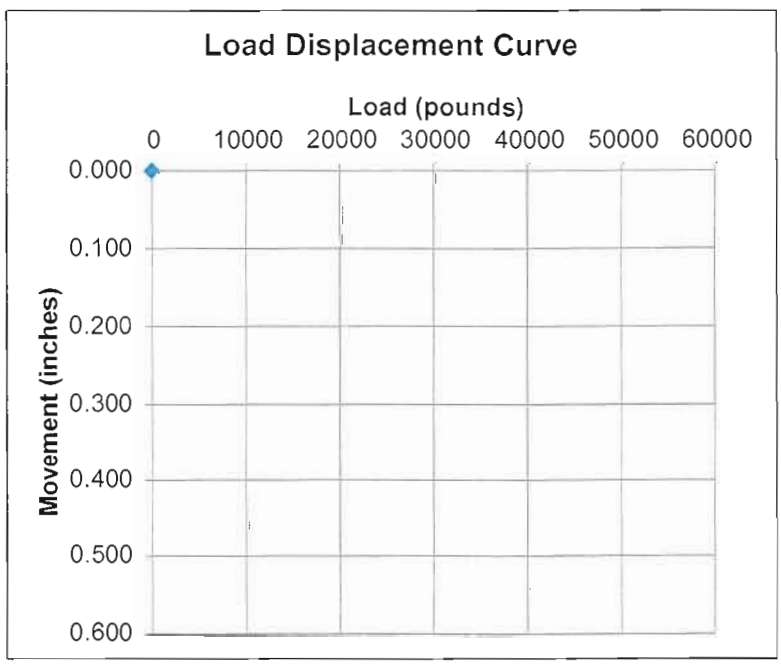
Actual Creep: ____ in

Stiffness: ____ kips/in

Calibration Equation:
Gauge Pressure = 0.079*Load + 113

Calibration Date: 5/22/2014

Testing Equipment:
60-ton jack RHA604D #350002,
P159D Pump Serial # 0901AR79126,
10,000psi Gauge (#2)



Continental

Proof Test Report

Test ID: proof test 30B Date: 7/11/14 Tester: Rob Dulin / Joe

Size: #9

Cross-sectional area:	in^2	Bond Length (min):	ft
Total Length: 15	ft	Unbonded Length: 14"	ft
Bore Hole Depth:	ft	Jack Length:	ft
Bore Hole Diameter: 4	in	Allowable Pullout Resistance:	psi
Bore Hole Inclination: 15	deg	Design Test Load:	lbs

Tester's Comments:

Load Cycle	Reading Times (min)	Load Increments (%)	Load Increments (lbs)	Pressure Gauge (psi)	Dial Gauge 1	Movement	Elastic Movement
	1	AL					
Load	0	0.25					
	0	0.50		350	0.245		
	0	0.75		469	0.246		
	0	1.00		587	0.247		
	0	1.25		705	0.248		
	0	1.50		825	0.250		
	1	1.50		825	0.250		
	2	1.50		825	0.250		
	3	1.50		825	0.250		
	5	1.50		825	0.250		
	6	1.50		825	0.250		
	10	1.50		825	0.250		
Unload	0	AL			0.244		

Allowable Creep (1-10 min): _____ in

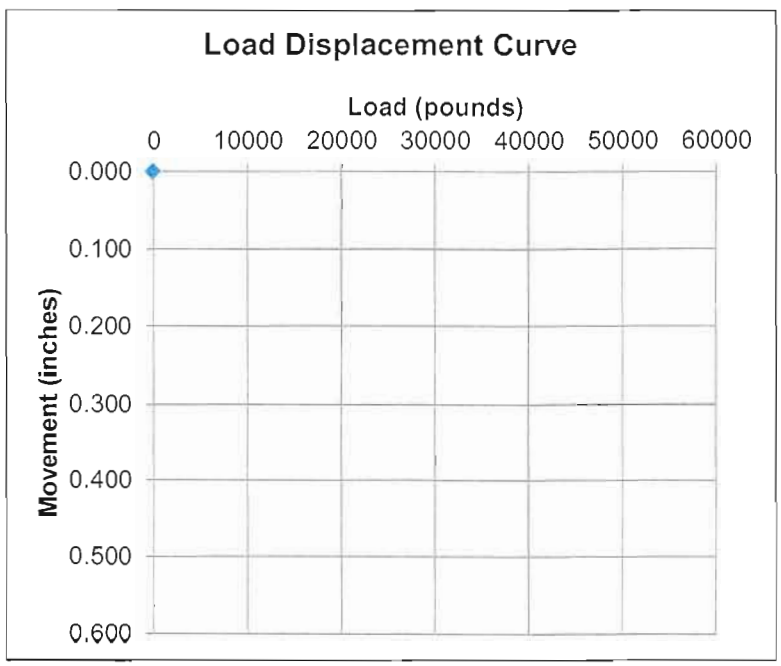
Actual Creep: _____ in

Stiffness: _____ kips/in

Calibration Equation:
Gauge Pressure = 0.079*Load + 113

Calibration Date: 5/22/2014

Testing Equipment:
60-ton jack RHA604D #350002,
P159D Pump Serial # 0901AR79126,
10,000psi Gauge (#2)



Continental
Proof Test Report

Test ID: proof test #35A Date: 7/16/14 Tester: Rob Davis / Joe

Size: #9

Cross-sectional area:	in^2	Bond Length (min):	ft
Total Length:	19 ft	Unbonded Length:	13" ft
Bore Hole Depth:	ft	Jack Length:	ft
Bore Hole Diameter:	4 in	Allowable Pullout Resistance:	psi
Bore Hole Inclination:	15 deg	Design Test Load:	lbs

Tester's Comments:

Load Cycle	Reading Times (min)	Load Increments (%)	Load Increments (lbs)	Pressure Gauge (psi)	Dial Gauge 1	Movement	Elastic Movement
	1	AL					
Load	0	0.25					
	0	0.50		350	0.759		
	0	0.75		469	0.763		
	0	1.00		587	0.766		
	0	1.25		705	0.767		
	0	1.50		825	0.769		
	1	1.50		825	0.770		
	2	1.50		825	0.770		
	3	1.50		825	0.770		
	5	1.50		825	0.770		
	6	1.50		825	0.770		
	10	1.50		825	0.771		
Unload	0	AL			0.762		

Allowable Creep (1-10 min): _____ in

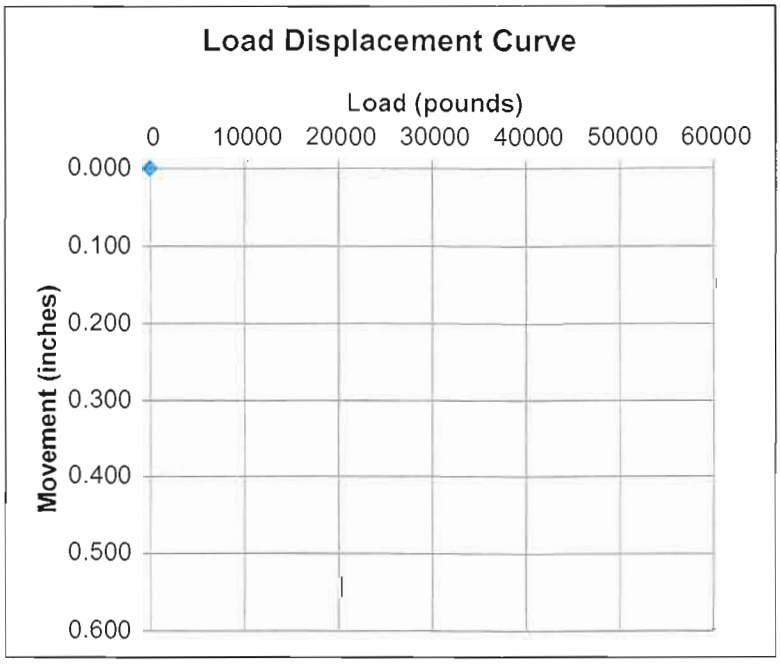
Actual Creep: _____ in

Stiffness: _____ kips/in

Calibration Equation:
Gauge Pressure = 0.079*Load + 113

Calibration Date: 5/22/2014

Testing Equipment:
60-ton jack RHA604D #350002,
P159D Pump Serial # 0901AR79126,
10,000psi Gauge (#2)



Continental
Proof Test Report

Test ID: proof test 40B Date: 7/11/14 Tester: Rog Davis / Joe

Size: _____

Cross-sectional area: _____ in^2

Total Length: 15 ft

Bore Hole Depth: _____ ft

Bore Hole Diameter: 4 in

Bore Hole Inclination: 15 deg

Bond Length (min): _____ ft

Unbonded Length: 13" ft

Jack Length: _____ ft

Allowable Pullout Resistance: _____ psi

Design Test Load: _____ lbs

Tester's Comments:

Load Cycle	Reading Times (min)	Load Increments (%)	Load Increments (lbs)	Pressure Gauge (psi)	Dial Gauge 1	Movement	Elastic Movement
	1	AL					
Load	0	0.25					
	0	0.50		350	0.585		
	0	0.75		469	0.585		
	0	1.00		587	0.586		
	0	1.25		705	0.587		
	0	1.50		825	0.588		
	1	1.50		825	0.588		
	2	1.50		825	0.588		
	3	1.50		825	0.588		
	5	1.50		825	0.589		
	6	1.50		825	0.589		
	10	1.50		825	0.589		
Unload	0	AL			0.583		

Allowable Creep (1-10 min): _____ in

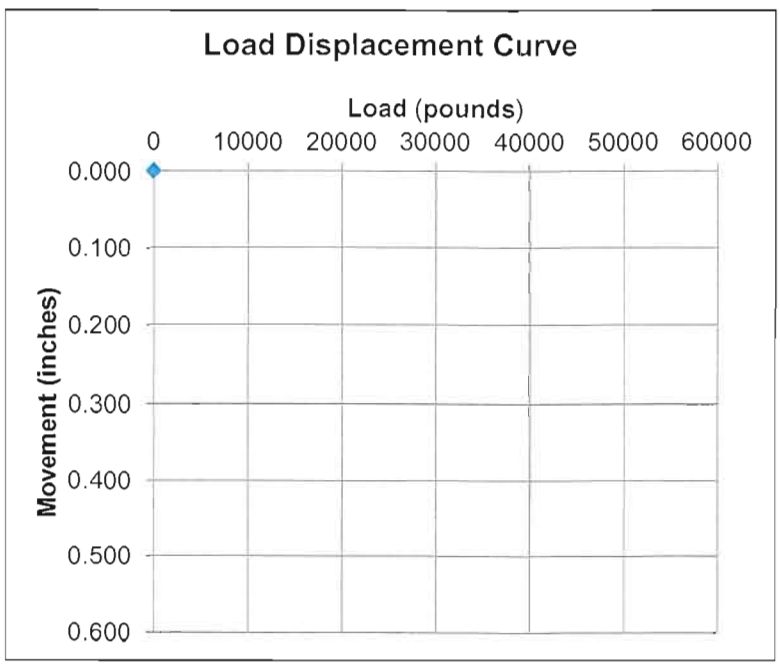
Actual Creep: _____ in

Stiffness: _____ kips/in

Calibration Equation:
Gauge Pressure = 0.079*Load + 113

Calibration Date: 5/22/2014

Testing Equipment:
60-ton jack RHA604D #350002,
P159D Pump Serial # 0901AR79126,
10,000psi Gauge (#2)



Continental

Proof Test Report

Test ID: proof test 45A Date: 7/1/14 Tester: Rob Davis / Joe

Size: #9

Cross-sectional area:	____ in^2	Bond Length (min):	____ ft
Total Length:	15 ft	Unbonded Length:	13" ft
Bore Hole Depth:	____ ft	Jack Length:	____ ft
Bore Hole Diameter:	4 in	Allowable Pullout Resistance:	____ psi
Bore Hole Inclination:	15 deg	Design Test Load:	____ lbs

Tester's Comments:

Load Cycle	Reading Times (min)	Load Increments (%)	Load Increments (lbs)	Pressure Gauge (psi)	Dial Gauge 1	Movement	Elastic Movement
	1	AL					
Load	0	0.25					
	0	0.50		350	0.443		
	0	0.75		469	0.456		
	0	1.00		587	0.458		
	0	1.25		705	0.461		
	0	1.50		825	0.463		
	1	1.50		825	0.463		
	2	1.50		825	0.463		
	3	1.50		825	0.463		
	5	1.50		825	0.463		
	6	1.50		825	0.464		
	10	1.50		825	0.465		
Unload	0	AL			0.445		

Allowable Creep (1-10 min): ____ in

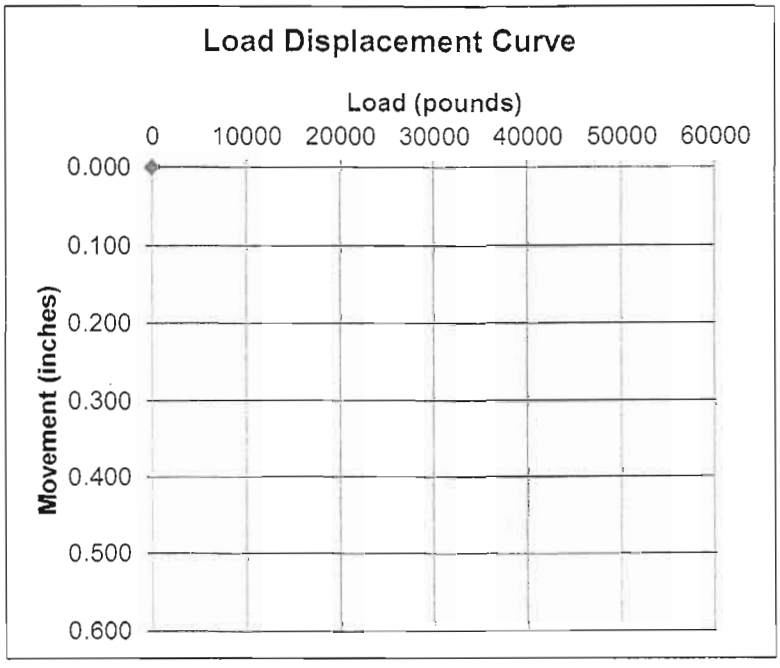
Actual Creep: ____ in

Stiffness: ____ kips/in

Calibration Equation:
Gauge Pressure = 0.079*Load + 113

Calibration Date: 5/22/2014

Testing Equipment:
60-ton jack RHA604D #350002,
P159D Pump Serial # 0901AR79126,
10,000psi Gauge (#2)



Continental
Proof Test Report

Test ID: proof test SOB Date: 7/11/14 Tester: Ross Davis / Jose

Size: #4

Cross-sectional area:	in^2	Bond Length (min):	ft
Total Length:	15 ft	Unbonded Length:	ft
Bore Hole Depth:	ft	Jack Length:	ft
Bore Hole Diameter:	4 in	Allowable Pullout Resistance:	psi
Bore Hole Inclination:	15 deg	Design Test Load:	lbs

Tester's Comments:

Load Cycle	Reading Times (min)	Load Increments (%)	Load Increments (lbs)	Pressure Gauge (psi)	Dial Gauge 1	Movement	Elastic Movement
	1	AL					
Load	0	0.25					
	0	0.50		350	0.426		
	0	0.75		469	0.435		
	0	1.00		587	0.438		
	0	1.25		705	0.440		
	0	1.50		825	0.443		
	1	1.50		825	0.443		
	2	1.50		825	0.444		
	3	1.50		825	0.444		
	5	1.50		825	0.444		
	6	1.50		825	0.444		
	10	1.50		825	0.444		
Unload	0	AL			0.427		

Allowable Creep (1-10 min): in

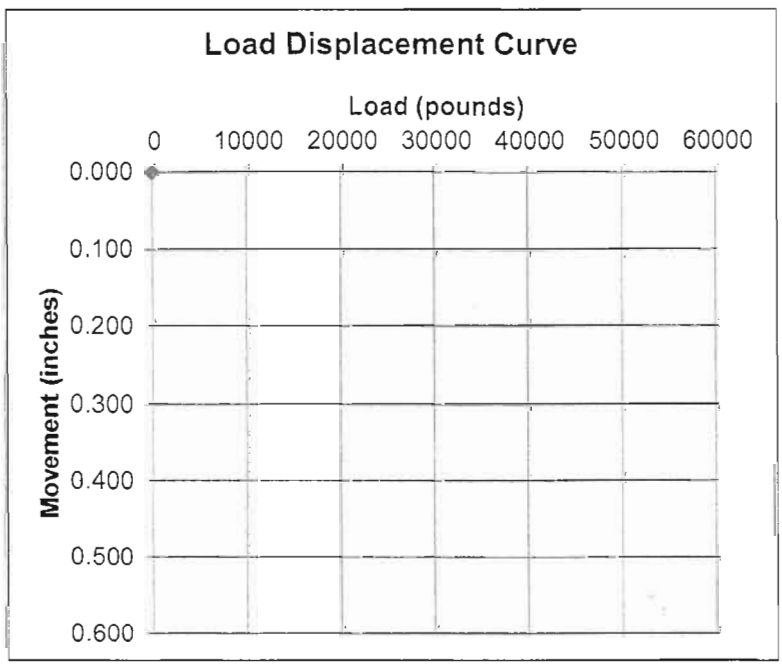
Actual Creep: in

Stiffness: kips/in

Calibration Equation:
Gauge Pressure = 0.079*Load + 113

Calibration Date: 5/22/2014

Testing Equipment:
60-ton jack RHA604D #350002,
P159D Pump Serial # 0901AR79126,
10,000psi Gauge (#2)



DRILL • BLAST • STABILIZATION • SCALING

ROCK SOLID
SOLUTIONS

DESIGN • BUILD

Memorandum

July 25, 2014

To: Moltz Constructors
Project: Continental Dam Rehabilitation Project – Hinsdale County Colorado
RE: Foundation Anchors Test Results, Project # 2014-012

Mr. Thomas Moltz,

In accordance with the Project Specifications Section 02490 Drilled Anchors, Rock Solid Solutions installed Foundation Anchors in the spillway chute area. The specifications (attached) 3.3 Field Testing require the foundation anchors to be tested *"not less than 48 hours and not more than 72 hours after grouting"*. Therefore, field testing was conducted on 7 additional Foundation Anchors installed in the spillway chute area.

The test load was specified to be *"50% of the specified minimum yield strength"* of the specified *"Grade 60, standard deformed bar"* that as indicated in the drawings was to have a minimum size of a #8 bar. Therefore, the Test load on the foundation anchors was mandated to be 30 kips.

Rock Solid tested 7 anchors selected by the Engineer, tests #11 - #14 were conducted on Foundation Anchors drilled in rock and test #15 thru #17 were in a soil rock mixture. The test locations are shown on the attached plan sheet. All 17 anchors were loaded by the RSS 60-ton Hydraulic ram, Power Team pump and gauge system in the presence of the on-site URS Engineer Mr. Joe Owen and the Moltz Construction representative. The May 21, 2014 calibration data for the Testing system was used. Results of the testing indicated that all 17 Foundation Anchors installed in soil and rock resisted the test load for the minimum 5 min hold period.

195 Lodgepole Circle, Parachute, CO 81635
Office: (970) 987-4247 Fax: (970) 712-5715

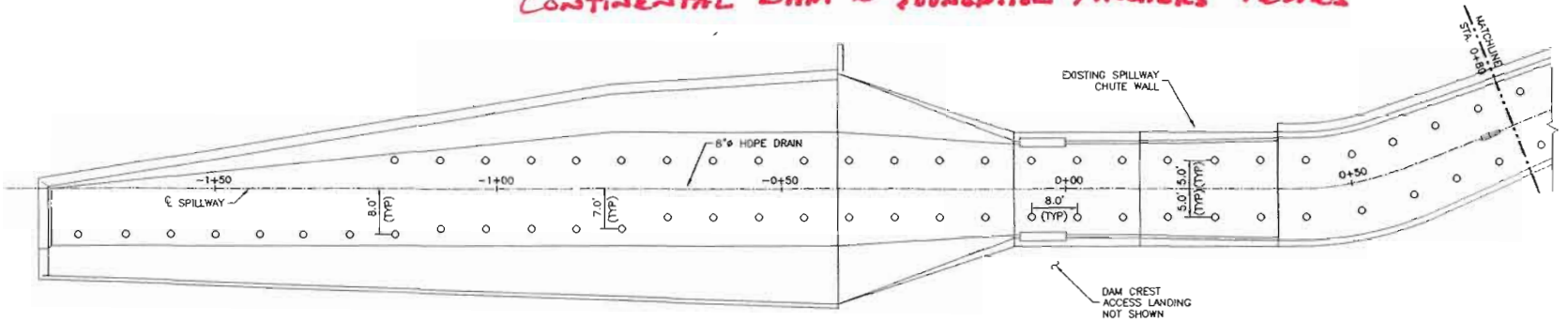
Rock Solid is confident that the means and methods utilized for installation of the Spillway Foundation Anchors will achieve the desired design loads for the project. RSS appreciates the opportunity to work with the design and construction team of URS and Moltz. Please call/email if any questions.

Respectfully,

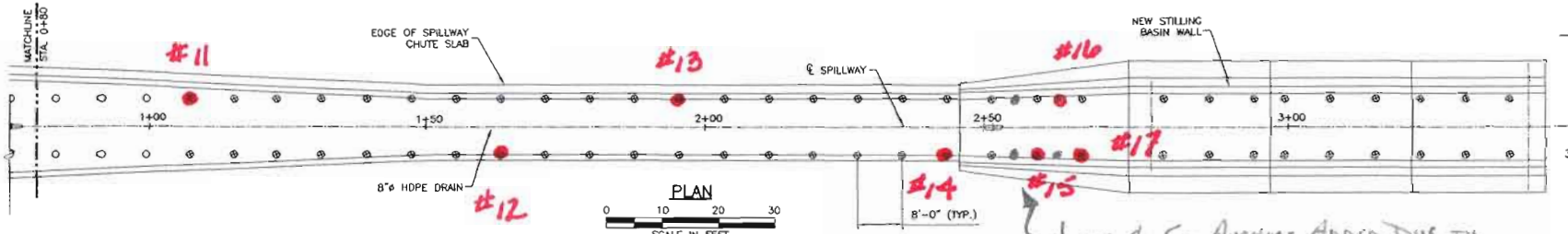
Patrick Breagy
Project Manager
Rock Solid Solutions
(970) 903-3028

Donald J. Berger, P.E
Project Engineer
Rock Solid Solutions
(970) 987-2743

CONTINENTAL DAM ~ FOUNDATION ANCHORS TESTED

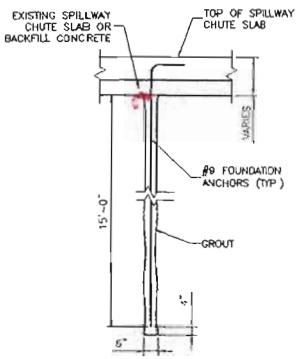


PLAN
0 10 20 30
SCALE IN FEET

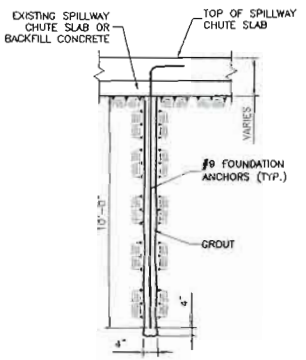


PLAN
0 10 20 30
SCALE IN FEET

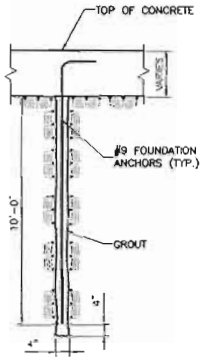
NOTE: 4 FND ANCHORS ADDED DUE TO GEOMETRY & LAYOUT



FOUNDATION ANCHOR DETAIL 1 S-10
STA. -1+75 TO STA. 1+05
0 2 4 8
SCALE IN FEET



FOUNDATION ANCHOR DETAIL 2 S-10
STA. 1+05 TO STA. 2+50
0 2 4 8
SCALE IN FEET



FOUNDATION ANCHOR DETAIL 3 S-10
STA. 2+50 TO STA. 3+22
0 2 4 8
SCALE IN FEET

LEGEND

- ○ #9 FOUNDATION ANCHOR EMBEDDED 15'-0" INTO SOIL
- ⊗ #9 FOUNDATION ANCHOR EMBEDDED 10'-0" INTO BEDROCK

NOTES:

1. CONTRACTOR SHALL COORDINATE THE LOCATIONS OF ALL FOUNDATION ANCHORS WITH THE DRAIN SYSTEM AND ALL JOINTS. FINAL LOCATIONS OF ALL FOUNDATION ANCHOR SHALL BE APPROVED BY THE ENGINEER.
2. THE LOCATION OF BEDROCK CONTACT IS APPROXIMATELY AT STA. 1+05. THE LOCATION OF THE TRANSITION FROM FOUNDATION ANCHORS INSTALLED INTO SOIL VS. FOUNDATION ANCHORS INSTALLED INTO ROCK WILL BE DETERMINED BY THE ENGINEER.
3. REINFORCEMENT NOT SHOWN IN FOUNDATION ANCHOR DETAILS.

SEO FILE NO. C-259C

URS
URS Center
8181 East Tufts Avenue
Denver, Co. 80237-2637
303-694-2770 (phone)
303-694-3946 (fax)

SANTA MARIA RESERVOIR COMPANY

CONTINENTAL DAM REHABILITATION

ISSUED FOR BIDDING
ISSUED FOR CONSTRUCTION

REVISIONS

NO	DESCRIPTION	DATE
△		
△		
△		
△		
△		

URS PROJECT NO:	22241248
DRAWN BY:	WGH
DESIGNED BY:	CJW
CHECKED BY:	CBG
DATE CREATED:	12/2011
PLOT DATE:	12/2011
SCALE:	AS SHOWN
ACAD VER:	2012

DRAWING TITLE

SPILLWAY FOUNDATION ANCHOR PLAN AND DETAILS

S-11

SHEET 26 OF 34

HANTEP PAUL R. 2/13/2014 3:58 PM
URS DRAWING PATH: N:\Projects\22241248_Santa_Maria_Conting\Civil_DWG\S-S_Constr_Drawings\Plan_Sheets\Spillway-Seepage (Continental Dam_S-11_Spillway Anchors).dwg

Memorandum

August 4, 2014

To: Moltz Constructors
Project: Continental Dam Rehabilitation Project – Hinsdale County Colorado
RE: Micropile Test Results 8-1-14 Project # 2014-012

Mr. Thomas Moltz,

In accordance with the Project Specifications Section 02496 Micropiles, Rock Solid Solutions installed the Micropiles in the spillway Stilling basin training wall. The specifications 3.3.B Verification Load Tests require that one (1) Verification Test and two (2) Proof Tests be conducted on the Micropiles. This results in approximately 10+% of the Micropiles will be tested. Therefore, field testing was conducted 8-1-14 on the Micropiles installed earlier. The test location map and test data sheets are attached for your records.

The test load was specified to be 6,200 lbs as indicated in the RFI Response and was a R38 size (1 ¼" dia) bar. Rock Solid conducted One (1) Verification Test and two (2) Proof Tests on a total of 29 micropiles installed and as selected by the Engineer. The test locations are shown on the attached plan sheet. All micropiles were loaded by the RSS 60-ton Hydraulic ram, Power Team pump and gauge system in the presence of the on-site URS Engineer Mr. Joe Owen or Mr. Pablo Virreira and the Moltz Construction representative. The May 21, 2014 calibration data provided with the June 9, 2014 Foundation Anchor Test results memorandum was used for the wall anchor tests as well. Results of the testing indicated that all micropiles installed in soil and rock resisted the test load in accordance with the project specifications.

Rock Solid is confident that the means and methods utilized for installation of the Temporary Micropiles in the Spillway stilling basin wall will achieve the desired design

195 Lodgepole Circle, Parachute, CO 81635
Office: (970) 987-4247 Fax: (970) 712-5715

loads for the project. RSS appreciates the opportunity to work with the design and construction team of URS and Moltz. Please call/email if any questions.

Respectfully,

Patrick Breagy
Project Manager
Rock Solid Solutions
(970) 903-3028

Donald J. Berger, P.E
Project Engineer
Rock Solid Solutions
(970) 987-2743



Micropile Layout



Proof Test #1, Note: Bearing materials

Continental Dam
Micropile Installations
Tests Location Map

8-1-14

DSBerg



14 @ 20' = 280'
14 @ 25' = 350'
1 @ 30' = 30'

29 Each → 660 Lf.

# of Vert From Right End

Verification Test

AL = Alignment Load, DL = Design Load = 6200 #			
	LOAD	Gauge	**HOLD TIME**
1	AL (0.05 DL)	150	1 minute 0.154
2	0.25 DL	150	1 minute
3	0.50 DL	300	1 minute 0.156
4	AL	150	1 minute 0.144
5	0.25 DL	150	1 minute
6	0.50 DL	300	1 minute 0.149
7	0.75 DL	450	1 minute 0.157
8	AL	150	1 minute 0.144
9	0.25 DL	150	1 minute
10	0.50 DL	300	1 minute 0.149
11	0.75 DL	450	1 minute 0.158
12	1.00 DL	600	1 minute 0.165
13	AL	150	1 minute 0.143
14	0.25 DL	150	1 minute
15	0.50 DL	300	1 minute 0.149
16	0.75 DL	750	1 minute 0.159
17	1.00 DL	600	1 minute 0.165
18	1.33 DL	800	60 minutes (Creep Test Load Hold)
19	1.75 DL	1050	1 minute 0.210
20	2.00 DL	1,206	1 minute 0.236
21	2.25 DL	1,350	1 minute 0.254
22	2.5 DL (Maximum Test Load)	1510	10 minute 0.272
23	AL	300	1 minute 0.233

1.33 DL Creep

min	Rdg
0	0.179
1	0.182
2	0.182
3	0.183
4	0.183
5	0.183
6	0.184
10	0.184
20	0.184
30	0.185
50	0.187
60	0.188

$\Delta_{1\text{-}60} \leq 0.004$ 10% OK!

2.5 DL Creep

0	0.270
1	0.272
2	0.273
3	0.274
4	0.275
5	0.277
6	0.277
10	0.278

$\Delta_{1\text{-}10} \leq 0.00$ OK!!!

Note:

Gauge = 0.079 Load + 113

6. The test load shall be applied in increments of 25 percent of the DL load. Each load increment shall be held for a minimum of 1 minute. Pile top movement shall be measured at each load increment. The load-hold period shall start as soon as each test load increment is applied. The verification test pile shall be monitored for creep at the 1.33 Design Load (DL). Pile movement during the creep test shall be measured and recorded at 1, 2, 3, 4, 5, 6, 10, 20, 30, 50 and 60 minutes. The alignment load shall not exceed 5 percent of the DL load. Dual gauges shall be reset to zero after the initial AL is applied.
7. The acceptance criteria for micropile verification load tests are:
   a. At the end of the 1.33 DL creep test load increment, test piles shall have a creep rate not exceeding 0.04 inches/log cycle time (1 to 10 minutes) or 0.08 inches/log cycle time (6 to 60 minutes or the last log cycle if held longer). The creep rate shall be linear or decreasing throughout the creep load hold period.
   b. Failure does not occur at the 2.5 DL maximum test load. Failure is defined as load at which attempts to further increase the test load simply result in continued pile movement.

DJB 8-1-14

CONTINENTAL DAM SPILLWAY
MICROPILE PROOF TESTS (2)

8. Verification Test Pile Rejection. If a verification-tested micropile fails to meet the acceptance criteria, the micropile contractor shall modify the design, the construction procedure, or both. These modifications may include modifying the installation methods, increasing the bond length, or changing the micropile type. Any modification that necessitates changes to the structure shall require the Engineer prior review and acceptance. Any modifications of design or construction procedures or cost of additional verification test piles and load testing shall be at the micropile contractor's expense. At the completion of verification testing, test piles shall be removed down to the elevation specified by the Engineer.

2 MP's; #1 = 7th Piles from left

C. Proof Load Tests. Perform tension proof load tests on the micropiles indicated on the Drawings. Test piles designated for tension proof load testing to a maximum test load of 1.67 times the micropile Design Load shown on the drawings. #2 = 2nd Piles From Left

1. Proof tests shall be made by incrementally loading the micropile in accordance with the following schedule:

AL = Alignment Load, DL = Design Load = 6,200#				#1	#2
	LOAD	GAUGE	**HOLD TIME**		
1	AL	150	1 minute	0.271	0.496
2	0.25 DL	150	1 minute	0.271	0.496
3	0.50 DL	300	1 minute	0.272	0.501
4	0.75 DL	450	1 minute	0.284	0.502
5	1.00 DL	600	1 minute	0.337	0.505
6	1.33 DL	800	10 or 60 minute Creep Test		0.506
7	1.67 DL (Maximum Test Load)	1000	1 minute	0.472	0.508
8	AL	300	1 minute	0.419	

1.33 DL #1 Creep

Min	Rdg
0	0.411
1	0.412
2	0.413
3	0.414
4	0.415
5	0.415
6	0.416
10	0.417

#2 Creep 1.33 DL

Min	Rdg
0	0.506
1	0.506
2	0.505
3	0.506
4	0.506
5	0.506
6	0.507
10	0.506

2. Depending on performance, either a 10-minute or 60-minute creep test shall be performed at the 1.33 DL Test Load. Where the pile top movement between 1 and 10 minutes exceeds 1 mm, the Maximum Test Load shall be maintained an additional 50 minutes. Movements shall be recorded at 1, 2, 3, 5, 6, 10, 20, 30, 50 and 60 minutes. The alignment load shall not exceed 5 percent of DL. Dial gauges shall be reset to zero after the initial AL is applied.

3. The acceptance criteria for micropile proof load tests are:

   a. The pile shall sustain the tension DL test load with no more than 0.5-inch total vertical movement at the top of the pile, relative to the position of the top of the pile prior to testing.

   b. At the end of the 1.33 DL creep test load increment, test piles shall have a creep rate not exceeding 0.04 inches/log cycle time (1 to 10 minutes) or 0.08 inches/log cycle time (6 to 60 minutes). The creep rate shall be linear or decreasing throughout the creep load hold period.

   c. Failure does not occur at the 1.67 DL maximum test load. Failure is defined as the load at which attempts to further increase the test load simply result in continued pile movement.

NOTE: BEARING PLATE 18" X 18" PUNCHING 1½"+

Δ 1-10 ≤ 0.005" OK!!!

NOTE: BEARING PLATE ON SOIL RACKING OFF BATTERED BACK WALL FOOTAGE

JOB SAFETY ANALYSIS (JSA)/ SAFETY MEETING

Rock solid Solutions Corporation **Date:** 5-1-14
195 Lodgepole Circle Parachute, CO 81635
Location:
Description of Work: 1409 Crystal Lake Rd - Soil Nail Wall and Micropile Installations
CONTINENTAL DAM ~ MICROPILE TESTING

Potential Hazards: Ground Stabiilization Operations -Drilling Operations / Installing Piles and Nails / Shotcreteing

(Check those that apply)

- [X] Lifting Hazards
- [ ] Drill Rotation
- [ ] Block and Tackle
- [ ] Chains or Pulleys
- [ ] Moving Casing
- [X] Pinching Areas and objects
- [ ] Lifting equipment (cranes, forklifts, straps)
- [X] Walk around hazard inspection completed
- [ ] Compressed Air
- [ ] Moving tracks
- [X] Load secure (strapped or chained)
- [ ] Trailer secure
- [ ] Grout Plant Awareness (noise and pressure)
- [ ] Overspray of shocrete under pressure
- [ ] concrete pump operations
- [ ] Pressured concrete hoses
- [X] Potential release of energy
- [X] safe zone (s)
- [ ] Handle explsoives per the manufacturers rec.
- [X] Noise awareness

ALL LOADS MUST BE CHOCKED AND/OR BLOCKED BEFORE LOADING OR UNLOADING BEGINS

Potential Hazards: Ground Stabilization Operations

(Check those that apply)

- [ ] Drill Rig Awareness
- [ ] Safe working distance rotating drill steel and casing
- [ ] Walk around hazard inspection completed
- [ ] Comm. established with other on-site contractors
- [ ] Lock Out/Tag Out needed (if needed)
- [X] Employee/equipment positioning
- [X] Potential release of energy
- [ ] Pinch, crush or striking hazard
- [ ] Heavy equipment in use
- [X] Remote location
- [ ] Sharp edges
- [X] Enviromental extremes (hot or cold)
- [X] Pre-job assessment completed

Other: _____

Special Precautions:

(Check those that apply)

- [X] Safe zone (s) enforced
- [X] Controlled Access Zone
- [X] Communications signals established
- [X] Pollution Prevention Measures
- [X] Redundant Protection Measures
- [ ] Simultaneous Operations
- [ ] Tag lines for pipe fitting
- [ ] Only authorized personnel operating equipment
- [X] Only authorized personnel to be within the Controlled access zone
- [X] Traffic and Equipments stops and designated safe zone (s)
- [ ] All applicable permits in place
- [ ] Employee concerns been addressed
- [ ] Short service employees

Other: _____

Applicable Safe Work Practices:

(Check those that apply)

- [X] Safe zone (s)
- [ ] Hot Work Permit
- [X] Energy isolation procedure
- [ ] Use of barricades
- [ ] Special pre-job safety discussions
- [ ] Hand signals established
- [ ] Confined space entry permit
- [X] Use of specialized PPE
- [X] Site/job orientation
- [ ] Review of energy action plan

Other: _____

List and discuss the ***Major Job Steps***, the ***Potential Hazards*** of each step and associated ***Consequences***, and the recommendations to eliminate or reduce hazards, and revise as conditions change during the course of the day's activities.

Major Job Steps	Potential Hazards & Consequences	Recommendations to Eliminate or Reduce Hazards
Lifting Safety		Posture, Reduce Load Sizes
Trips & Falls		Clear Pathways
Labor Efforts		Watch Rate of Effort & Use Water

SAFETY/TAILGATE MEETING RECORD

JOB: _____

Dwight Burge 8-1-14

KEY POINT:

1. _____
2. _____
3. _____
4. _____
5. _____

Applications to Project: _____

Safety Reminders: _____

Employee Safety Reminders: _____

Meeting Attended By:

Foreman: _____

Pusher: _____

Memorandum

August 4, 2015

To: Moltz Constructors
Project: Continental Dam Rehabilitation Project – Hinsdale County Colorado
RE: Foundation Anchors Test Results, Project # 2014-012

Mr. Thomas Moltz,

In accordance with the Project Specifications Section 02490 Drilled Anchors, Rock Solid Solutions installed Foundation Anchors in the spillway chute area. Field testing was conducted on 3 Foundation Anchors installed in the spillway chute and stilling basin area.

The test load was specified to be *"50% of the specified minimum yield strength"* of the specified *"Grade 60, standard deformed bar"* that as indicated in the drawings was to have a minimum size of a #8 bar. Therefore, the Test load on the foundation anchors was mandated to be 30 kips.

Rock Solid tested 3 anchors selected by the Engineer, tests #18- #20 were conducted on Foundation Anchors drilled in a soil rock mixture. The test locations are shown on the attached plan sheet. All 3 anchors were loaded by the RSS 60-ton Hydraulic ram, Power Team pump and gauge system in the presence of the on-site URS Engineer Mr. Joe Owen and the Moltz Construction representative. Results of the testing indicated that all 3 Foundation Anchors installed in soil and rock resisted the test load for the minimum 5 min hold period.

Rock Solid is confident that the means and methods utilized for installation of the Spillway Foundation Anchors will achieve the desired design loads for the project. RSS appreciates

195 Lodgepole Circle, Parachute, CO 81635
Office: (970) 987-4247 Fax: (970) 712-5715

the opportunity to work with the design and construction team of URS and Moltz. Please call/email if any questions.

Respectfully,

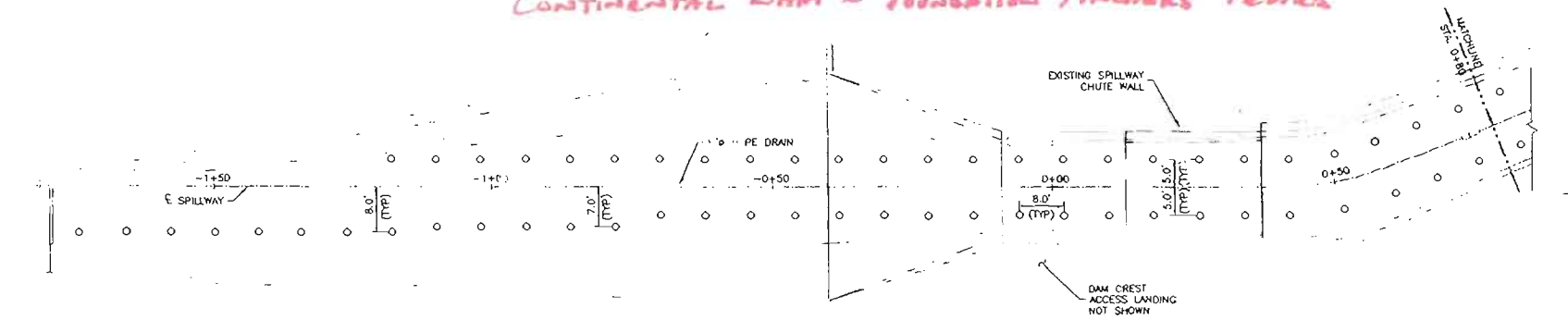




Patrick Breagy
Project Manager
Rock Solid Solutions
(970) 903-3028

Donald J. Berger, P.E
Project Engineer
Rock Solid Solutions
(970) 987-2743

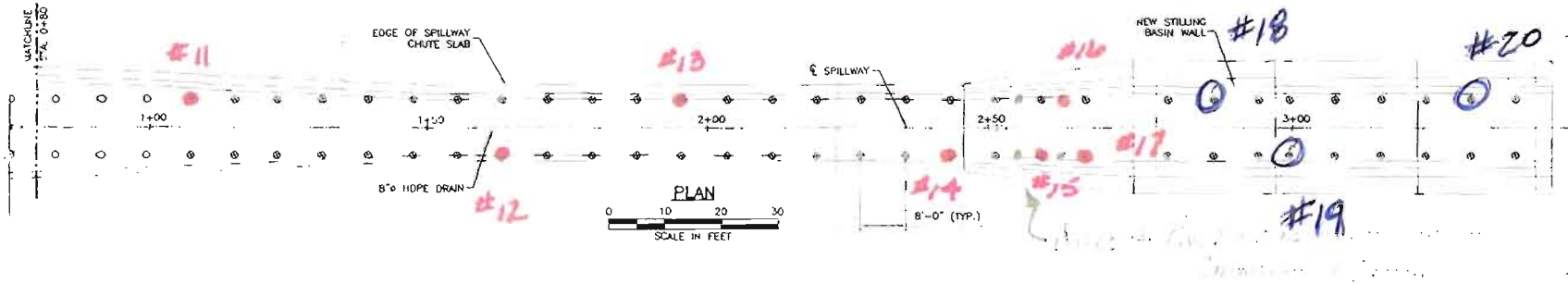
CONTINENTAL DAM - FOUNDATION ANCHORS TESTED



PLAN

0 10 20 30

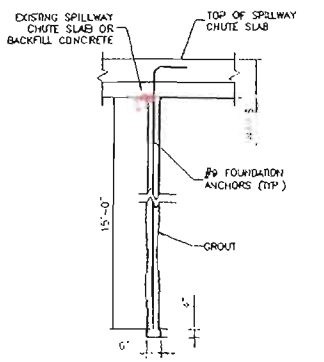
SCALE IN FEET



PLAN

0 10 20 30

SCALE IN FEET

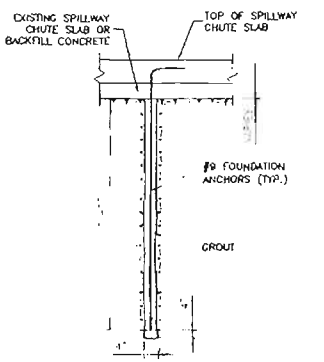


FOUNDATION ANCHOR DETAIL 1 (S-10)

STA. -1+75 TO STA. 1+05

0 2 4 8

SCALE IN FEET

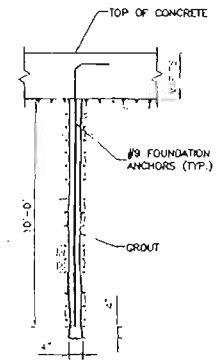


FOUNDATION ANCHOR DETAIL 2 (S-10)

STA. 1+05 TO STA. 2+50

0 2 4 8

SCALE IN FEET



FOUNDATION ANCHOR DETAIL 3 (S-10)

STA. 2+50 TO STA. 3+22

0 2 4 8

SCALE IN FEET

LEGEND

- ○ #9 FOUNDATION ANCHOR EMBEDDED 15'-0" INTO SOIL
- ⊗ #9 FOUNDATION ANCHOR EMBEDDED 10'-0" INTO BEDROCK

NOTES:

1. CONTRACTOR SHALL COORDINATE THE LOCATIONS OF ALL FOUNDATION ANCHORS WITH THE DRAIN SYSTEM AND ALL JOINTS. FINAL LOCATIONS OF ALL FOUNDATION ANCHOR SHALL BE APPROVED BY THE ENGINEER.
2. THE LOCATION OF BEDROCK CONTACT IS APPROXIMATELY AT STA. 1+05. THE LOCATION OF THE TRANSITION FROM FOUNDATION ANCHORS INSTALLED INTO SOIL VS. FOUNDATION ANCHORS INSTALLED INTO ROCK WILL BE DETERMINED BY THE ENGINEER.
3. REINFORCEMENT NOT SHOWN IN FOUNDATION ANCHOR DETAILS.

SEO FILE NO. C-259C

URS

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303-694-2770 (phone)
303-694-3946 (fax)

SANTA MARIA RESERVOIR COMPANY

CONTINENTAL DAM REHABILITATION

ISSUED FOR CONSTRUCTION

REVISIONS

NO	DESCRIPTION	DATE
△		
△		
△		
△		
△		

URS PROJECT NO.	22241745
DESIGNED BY:	
DRAWN BY:	
CHECKED BY:	CBG
DATE DESIGNED:	12/2011
PLOT DATE:	12/2011
SCALE:	AS SHOWN
ACAD VER:	2012

DRAWING TITLE

SPILLWAY FOUNDATION ANCHOR PLAN AND DETAILS

S-11

SHEET 26 OF 34