



LOST CREEK GROUNDWATER MANAGEMENT DISTRICT

50005 E. 120th Ave., Bennett, CO 80102

Bill Warren - Kent Crisman - John Sauter - Curtis Baumgartner
Todd Denning - Gerald Graybill - Thomas Sauter

**To: Colorado Water Conservation Board – Craig Godbout, CWCB Water Supply Planning
South Platte Basin Roundtable – Jason Roudebush, WSRF Coordinator**

1. The purpose of this letter is to provide the final reporting requirement for project ***PDAA 2500 WSRF_Lost Creek Instrumentation in SPRB***. Order Number ***POGG1,PDAA,201800000832***. The project was approved with notice to proceed on 3 April , 2018 with an initial completion estimate of 30 September 18. Lost Creek applied for and was granted an extension of time to complete the project by 31 July, 2019. The need for extension is discussed in Paragraph 2. The project was completed on 10 June, 2019.

2. The delay in project completion arose from three separate issues intersecting our plan. ***First***, the originally specified technology was a previous generation that would be outdated in a short time. Our vendors Hydrologik and Dynotek specified and reordered state of the art equipment when it became available. This item pushed our installation timeline back approximately 4 months. The ***second*** issue was inaccurate data in the Division of Water Resources database that required multiple visual inspections to determine if a well was actually at the permitted site. We found many old permits that are no longer valid. To overcome this issue, the principal technician made visits to each site to confirm well location and viability for the project. The ***last item*** was a public relations issue within the basin. After 35 years of litigation by outside agencies to gain exportation of water from the designated basin, many well owners were suspicious of the project. We developed a presentation and letter to inform candidate owners of the purpose and made personal visits to each site to discuss concerns and answer questions. Even with this outreach we still had many who spent long times deciding to participate. All of these items combined with a staff of volunteers who all work full time in other disciplines lengthened the timeline into winter. We elected to ask for the extension to avoid compromising any well equipment in freezing conditions.

3. Our initial budget estimate proposed in the grant process requested \$68,000 from CWCB and SPBRT sources with Lost Creek Groundwater Management District providing \$25,000 of matching funds. Initial equipment budget was \$73,705 as estimated by Dynotek and Hydrologik. As noted previously, an upgrade to equipment was proposed to LCGWMD and accepted. This raised the equipment cost to \$81,385.50 paid to Dynotek and Hydrologik. Lost Creek GWMD paid for labor costs and additional installation equipment. The final tally for LCGWMD was \$32,006.83. The full price of the project was \$100,006.33. We have received \$61,200 from WSRF grant at the time of this writing and await the final 10% - \$6800.

4. Lost Creek GWMD ***provided all matching funds per the estimate and additionally covered cost increases*** to upgrade to technology now being employed in the South Platte Basin.



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5. Attachments to this report follow in subsequent pages.

- a. Notice to Proceed
- b. Extension request approval
- c. Map of sites installed
- d. Site Array Summary
- e. Well Cooperator form to integrate into Co DWR HydroBase.

6. Questions on this final report may be directed to the principal technician and project manager, Todd Denning at lbgwmd@rtebb.net or (970) 396-3205. The Lost Creek Board thanks both CWCB and SPBRT for supporting our development of appropriate technology to support Colorado Ground Water Commission's changes to Rules 5.6 and 5.8 and the identification of Lost Creek Designated Basin as the optimum aquifer storage and recovery candidate on the Front Range.

Lost Creek Groundwater Management District
Bill Warren, President

April 4, 2018

Lost Creek Groundwater Management District
Attn: Tom Sauter, General Manager
50005 E. 120th Avenue
Bennett, CO 80102-9412

Dear Tom:

We are pleased to inform you that the Colorado Department of Natural Resources, Colorado Water Conservation Board (CWCB) has approved your application for funding pursuant to the WSRF Grant Program ("Program") in the amount of \$25,000. This letter authorizes you to proceed with the Lost Creek Designated Basin Instrumentation Project ("Project") in accordance with the terms of this Grant Award Letter.

Attached to this letter are the terms and conditions of your Grant. Please review these terms and conditions, as they are requirements of this Grant to which you, Lost Creek Groundwater Management District agree by accepting the Grant Funds.

The WSRF Criteria & Guidelines can be located on our website for additional information.

If you have any questions or concerns regarding the project, please contact Craig Godbout, Project Manager at 303-866-3441 ext. 3210 or at Craig.Godbout@state.co.us. Please send the 6-month progress reports and invoices directly to the Project Manager and cc me at Dori.vigil@state.co.us.

Thank you.

Sincerely,

//s//

Doriann Vigil
Program Assistant II
O 303-866-3441 ext. 3250
1313 Sherman Street, Rm. 719, Denver, CO 80203
Dori.vigil@state.co.us / cwcb.state.co.com

Attachments



STATE OF COLORADO
Department of Natural Resources

Page 1 of 2

ORDER		*****IMPORTANT*****				
Number:	POGG1,PDAA,201800000832	The order number and line number must appear on all invoices, packing slips, cartons, and correspondence. Please review each line for its corresponding shipping/billing address and delivery instructions.				
Date:	04/03/18					
Description:	PDAA 2500 WSRF_Lost Creek Instrumentation in SPRB					
Effective Date:	04/03/18					
Expiration Date:	09/30/18					
BUYER						
Buyer:						
Email:						
VENDOR						
LOST CREEK GROUNDWATER MGMT DIST						
50005 E 120TH AVE						
BENNETT, CO 80102-9415						
Contact:	.					
Phone:	3036443314					
EXTENDED DESCRIPTION						
Line Item	Commodity/Item Code	UOM	QTY	Unit Cost	Total Cost	MSDS Req.
1	G1000		0	0.00	\$25,000.00	<input type="checkbox"/>
Description: PDAA 2500 WSRF_Lost Creek Instrumentation in SPRB						
Service From: 4/3/18			Service To: 9/30/18			
Delivery Instructions						
FOB: FOB Dest, Freight Allowed			Delivery Date:			
Instructions:						
Ship To:			Bill To:			
COLORADO WATER BOARD			COLORADO WATER BOARD CONSERVATION			
1313 SHERMAN STREET, ROOM 718			1313 SHERMAN STREET, ROOM 718			
DENVER,CO 80203			DENVER,CO 80203			
Line Item	Commodity/Item Code	UOM	QTY	Unit Cost	Total Cost	MSDS Req.
2	G1000		0	0.00	\$43,000.00	<input type="checkbox"/>
Description: PDAA 2500 WSRF_Lost Creek Instrumentation in SPRB						
Service From: 4/3/18			Service To: 9/30/18			
Delivery Instructions						



STATE OF COLORADO
Department of Natural Resources

FOB:	FOB Dest, Freight Allowed	Delivery Date:
Instructions:		
Ship To:		Bill To:
COLORADO WATER BOARD 1313 SHERMAN STREET, ROOM 718 DENVER,CO 80203		COLORADO WATER BOARD CONSERVATION 1313 SHERMAN STREET, ROOM 718 DENVER,CO 80203
TERMS AND CONDITIONS		
https://www.colorado.gov/pacific/osc/small-dollar-grant-award-terms-conditions		
DOCUMENT TOTAL = \$68,000.00		



STATE OF COLORADO
Department of Natural Resources

Page 1 of 2

ORDER

*****IMPORTANT*****

Number: POGG1,PDAA,201800000832

Date: 7/31/18

Description:

Roll Document from 2018 to 2019

Effective Date: 04/03/18

Expiration Date: 07/31/19

The order number and line number must appear on all invoices, packing slips, cartons, and correspondence. Please review each line for its corresponding shipping/billing address and delivery instructions.

BUYER

Buyer:

Email:

VENDOR

LOST CREEK GROUNDWATER MGMT DIST

50005 E 120TH AVE

BENNETT, CO 80102-9415

Contact: .

Phone: 3036443314

EXTENDED DESCRIPTION

Line Item	Commodity/Item Code	UOM	QTY	Unit Cost	Total Cost	MSDS Req.
1	G1000		0	0.00	\$25,000.00	<input type="checkbox"/>

Description: PDAA 2500 WSRF_Lost Creek Instrumentation in SPRB

Service From: 04/03/18

Service To: 07/31/19

Delivery Instructions

FOB: FOB Dest, Freight Allowed

Delivery Date: -

Ship To:

Bill To:

COLORADO WATER BOARD
CONSERVATION

COLORADO WATER BOARD CONSERVATION

1313 SHERMAN STREET, ROOM 718

1313 SHERMAN STREET, ROOM 718

DENVER, CO 80203

DENVER, CO 80203

Line Item	Commodity/Item Code	UOM	QTY	Unit Cost	Total Cost	MSDS Req.
2	G1000		0	0.00	\$43,000.00	<input type="checkbox"/>

Description: PDAA 2500 WSRF_Lost Creek Instrumentation in SPRB

Service From: 04/03/18

Service To: 09/30/18

Delivery Instructions

FOB: FOB Dest, Freight Allowed

Delivery Date: -

Ship To:

Bill To:

COLORADO WATER BOARD
CONSERVATION

COLORADO WATER BOARD CONSERVATION



STATE OF COLORADO
Department of Natural Resources

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1313 SHERMAN STREET, ROOM 718
DENVER, CO 80203

1313 SHERMAN STREET, ROOM 718
DENVER, CO 80203

TERMS AND CONDITIONS

<https://www.colorado.gov/pacific/osc/small-dollar-grant-award-terms-conditions>

REASON FOR MODIFICATION

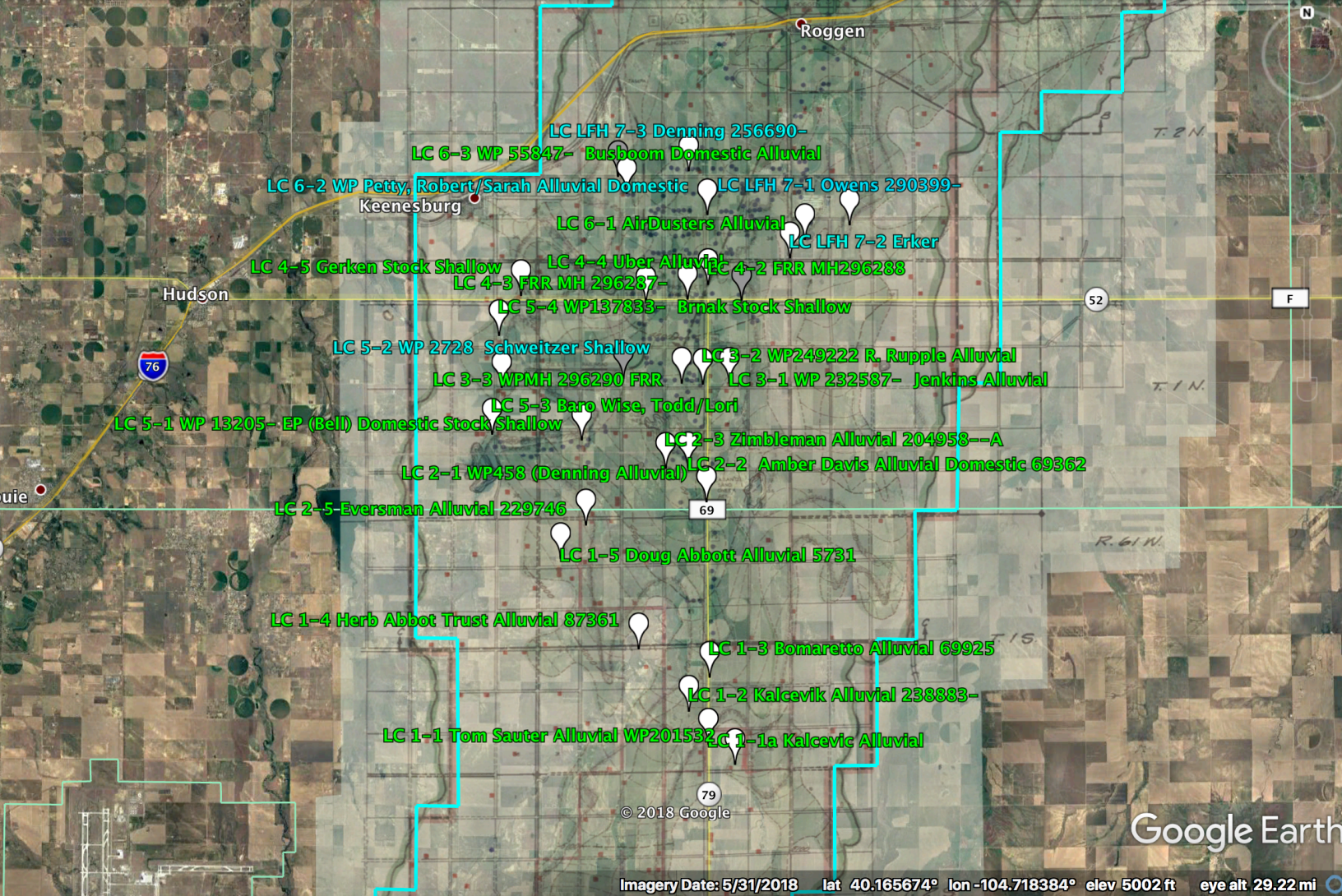
Change Order Number: 1

Time extension

DOCUMENT TOTAL = \$68,000.00

LCGWMD Water Level Monitoring Network

Lost Creek Designation	Location (WGS-84/GPS)			Owner Name	Permit Number	Water Level (ft)	Well Depth (ft)	Saturated Depth	Ground Elevation	Well Head Height	Serial Number (Unit)
	Lat	Long									
Line 1 Adams County (120th to 160th Diagonal)											
LC 1-1	39° 54.759'	104° 24.138'	COMPLETE	Sauter, Thomas	201532	98.1	135		5150	-6.2	2718012574
LC 1-1a	39.919634'	-104.414306	COMPLETE	Kalcevic Farms	313044-	125	180		5134	-8.5	2718012575
LC 1-2	39° 55.862	-104.423068°	COMPLETE	Kalcevic Farms (Jim)	238883-	109	200		5123	1	2718012578
LC 1-3	39° 56.565'	104° 24.823'	COMPLETE	Bomaretto	69925	118.7	198		5092	3.2	2718012572
LC 1-4	39° 57.153'	104° 26.744'	COMPLETE	Abbott Trust	87361	75.4	90		5084	1.2	2718012577
LC 1-5	39° 59.021'	104° 28.857'	COMPLETE	Abbott, Doug	5731	47.5	80		5030	0.9	2718012571
Line 2 (County Road 2/4)											
LC 2-1 Baro	40° 00.199'	104° 24.906'	COMPLETE	Denning, Todd	458	111.3	168		4984	1.5	2918012675
LC 2-2	40° 00.905'	104° 25.404'	COMPLETE	Davis, Amber	69362	104.5	180		4958	0.75	2418012431
LC 2-3	40° 00.895'	104° 26.011'	COMPLETE	Zimbleman Leon	204958--A	Est 105	140		4972	1.5	2418012435
LC 2-5	39° 59.720'	104° 28.174'	COMPLETE	Eversman, John & Donna	229746	105.8	120		4999	1.7	2418012430
Line 3 (County Road 8)											
LC 3-1	40° 02.658'	104° 24.281'	COMPLETE	Jenkins, Texal	232587-	52.5	105		4897	-3.9	2718012573
LC 3-2	40° 02.645'	104° 25.007'	COMPLETE	Rupple, Ryan & Brittany	249222	108	116		4907	0.4	2418012433
LC 3-3	40° 02.662'	104° 25.574'	COMPLETE	Front Range MH	MH296290	70.3	123		4893	2.8	2718012579
LC 3-4	40° 02.756'	104° 27.202	COMPLETE	Cardinal Community Academy	276555-	47.1	65		4892	2.8	2918012669
Line 4 (Highway 52)											
LC 4-1	40.073052°	-104.399629°	COMPLETE	Zimbleman Jill	287227-	46.35	100		4843	0.9	2918012670
LC 4-2	40.078517°	-104.414350°	COMPLETE	Front Range MH	MH296288	61	105		4841	2.8	2918012671
LC 4-3	40.073423°	-104.434404°	COMPLETE	Front Range MH	MH296287	59.8	124		4847	2.8	2918012672
LC 4-4	40.072572°	-104.442462°	COMPLETE	Uber, Beulah (Rich Gibson)	175565--A	38	95		4850	0.7	2918012668
LC 4-5	40.074614°	-104.498936°	COMPLETE	Gerken, Warren & Sandra Stock	242576-	21	80		4947	0.9	2918012674
Prospect Reservoir Valley											
LC 5-1	40.024748	-104.471474	COMPLETE	Bell, Carol Dom/Stock	13205-	50	105		4944	2.3	2918012676
LC 5-2	40.042854	-104.507626	COMPLETE	Schweizer, Michael & Vicki Sue	2728				4991		2418012434
LC 5-3 Baro	40.026683	-104.511914	COMPLETE	Wise, Todd and Lori Stock	177710--A	14	58		5021	1.3	2918012677
LC 5-4	40.060787	-104.508859	COMPLETE	Brnak, Jim Stock	137833-	6.5	85		4979	1.1	2918012678
Line 6 (County Road 16)											
LC 6-1	40° 05.643'	104° 22.228'	COMPLETE	Schellenberg Air Dusters	8779-RFP-R	39.4	50		4778	1	2918012680
LC 6-2	40.102670°	-104.414622°	COMPLETE	Petty, Robert Domestic	256480-				4808		2718012570
LC 6-3	40.109699	-104.451338	COMPLETE	Willard (Busboom) Domestic	55847-	18	49		4795	0.5	2918012681
Line 7 (LFH Monitoring Line)											
LC LFH 7-1	40.099133	-104.350174	COMPLETE	Owens, Keith & Marisa	290399-	251.3	620		4802	0.9	2918012679
LC LFH 7-2	40.087734	-104.377208	COMPLETE	Erker, Harold and Beth	78701-	263.15	516	9-440/6-516	4823	1.25	2718012576
LC LFH 7-3	40.117907	-104.423049	COMPLETE	Denning, James & Jennifer	256690-	294.45	630		4789	0.9	2918012682
LC LFH 7-4	40.115894	-104.455128	COMPLETE	Gerkin, Taylor & Tanna	299153-	268	630		4790	0.8	2918012673



Roggen

LC LFH 7-3 Denning 256690-

LC 6-3 WP 55847- Busboom Domestic Alluvial

LC 6-2 WP Petty, Robert/Sarah Alluvial Domestic

LC LFH 7-1 Owens 290399-

Keenesburg

LC 6-1 AirDusters Alluvial

LC LFH 7-2 Erker

LC 4-5 Gerken Stock Shallow

LC 4-4 Uber Alluvial

LC 4-2 FRR MH296288

LC 4-3 FRR MH 296287-

LC 5-4 WP137833- Brnak Stock Shallow

Hudson

76

52

F

LC 5-2 WP 2728 Schweitzer Shallow

LC 3-2 WP249222 R. Ruppel Alluvial

LC 3-3 WPMH 296290 FRR

LC 3-1 WP 232587- Jenkins Alluvial

LC 5-3 Bara Wise, Todd/Lori

LC 5-1 WP 13205- EP (Bell) Domestic Stock Shallow

LC 2-3 Zimbleman Alluvial 204958--A

LC 2-1 WP458 (Denning Alluvial)

LC 2-2 Amber Davis Alluvial Domestic 69362

LC 2-5 Eversman Alluvial 229746

69

LC 1-5 Doug Abbott Alluvial 5731

R. 61 N.

LC 1-4 Herb Abbot Trust Alluvial 87361

LC 1-3 Bomaretto Alluvial 69925

LC 1-2 Kalcevik Alluvial 238883-

LC 1-1 Tom Sauter Alluvial WP201532

LC 1-1a Kalcevik Alluvial

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Google Earth

Imagery Date: 5/31/2018 lat 40.165674° lon -104.718384° elev 5002 ft eye alt 29.22 mi

Highlighted Fields are Required				Coordinates									
Well Name	Permit #	Receipt #	WDID	UTM X	UTM Y	Ground Surface Elevation	Elevation Accuracy	Well Depth	Measuring Point Description	Measuring Point Stick Up	Aquifer	Alt. Aquifer	Comment
				(meters)	(meters)	(feet)	(dropdown)	(feet)		(feet)			
LC 1-1	201532	0410653A		551076	4418228.7	5150	3 meter DEM	135	Top of well casing	-6.2	Quaternary Alluvium	None	
LC 1-1a	313044-	3691005		550055.8	4419001.7	5134	3 meter DEM	180	Top of well casing	-8.5	Quaternary Alluvium	None	
LC 1-2	238883-	0487047A		549248.1	4420195.8	5123	3 meter DEM	200	Top of well casing	1	Quaternary Alluvium	None	
LC 1-3	69925	9004338		550090.5	4421587.5	5092	3 meter DEM	198	Top of well casing	3.2	Quaternary Alluvium	None	
LC 1-4	87361	9004663		547345.5	4422638.5	5084	3 meter DEM	90	Top of well casing	1.2	Quaternary Alluvium	None	
LC 1-5	5731	9000783		544135.3	4425987.4	5030	3 meter DEM	80	Top of well casing	0.9	Quaternary Alluvium	None	
LC 2-1B	458	9058492		549767	4428206	4984	3 meter DEM	168	Top of well casing	1.5	Quaternary Alluvium	None	
LC 2-2	69362	9065189		549162.9	4428806.5	4958	3 meter DEM	180	Top of well casing	0.75	Quaternary Alluvium	None	
LC 2-3	204958--A	418274		548288.3	4429539.4	4972	3 meter DEM	140	Top of well casing	1.5	Quaternary Alluvium	None	
LC 2-5	229746	467647		545339.4	4427406.4	4999	3 meter DEM	120	Top of well casing	1.7	Quaternary Alluvium	None	
LC 3-1	232587-	0473903D		550786.4	4432849.9	4897	3 meter DEM	105	Top of well casing	-3.9	Quaternary Alluvium	None	
LC 3-2	249222	507026		549768.6	4432819.4	4907	3 meter DEM	116	Top of well casing	0.4	Quaternary Alluvium	None	
LC 3-3	MH296290	3667120F		549100	4432844.3	4893	3 meter DEM	123	Top of well casing	2.8	Quaternary Alluvium	None	
LC 3-4	276555-	3625252B		546688.6	4433001.5	4892	3 meter DEM	65	Top of well casing	2.8	Quaternary Alluvium	None	
LC 4-1	287227-	3652520		551193.9	4436038.0	4843	3 meter DEM	100	Top of well casing	0.9	Quaternary Alluvium	None	
LC 4-2	MH296288	3667120D		549926.3	4436631.1	4841	3 meter DEM	105	Top of well casing	2.8	Quaternary Alluvium	None	
LC 4-3	MH296287	3667120C		549104.9	4436057.5	4847	3 meter DEM	124	Top of well casing	2.8	Quaternary Alluvium	None	
LC 4-4	175565--A	0360926B		547541.3	4435961.9	4850	3 meter DEM	95	Top of well casing	0.7	Quaternary Alluvium	None	
LC 4-5	242576-	0495217B		542724.2	4436159.0	4947	3 meter DEM	80	Top of well casing	0.9	Quaternary Alluvium	None	
LC 5-1	13205-	9061516		544994.1	4430750.9	4944	3 meter DEM	105	Top of well casing	2.3	Quaternary Alluvium	None	
LC 5-2	2728	9058950		542151.6	4432545.5	4991	3 meter DEM		Top of well casing		Quaternary Alluvium	None	
LC 5-3B	177710--A	0365167B		541670.9	4430932.4	5021	3 meter DEM	58	Top of well casing	1.3	Quaternary Alluvium	None	
LC 5-4	137833-	250158		541898.5	4434614.0	4979	3 meter DEM	85	Top of well casing	1.1	Quaternary Alluvium	None	
LC 6-1	8779-RFP-R	3685857		553662.0	4438378.0	4778	3 meter DEM	50	Top of well casing	1	Quaternary Alluvium	None	
LC 6-2	256480-	523248		549892.9	4439316.9	4808	3 meter DEM		Top of well casing		Quaternary Alluvium	None	
LC 6-3	55847-	9064817		546775.3	4440121.0	4795	3 meter DEM	49	Top of well casing	0.5	Quaternary Alluvium	None	
LC LFH 7-1	290399-	3658862		555375.0	4438963.0	4802	3 meter DEM	620	Top of well casing	0.9	LFH	None	
LC LFH 7-2	78701-	9065529		553083.0	4437683.4	4823	3 meter DEM	516	Top of well casing	1.25	LFH	None	
LC LFH 7-3	256690-	523715		549204.9	4440952.0	4789	3 meter DEM	630	Top of well casing	0.9	LFH	None	
LC LFH 7-4	299153-	3668562		546402.1	4440741.5	4790	3 meter DEM	630	Top of well casing	0.8	LFH	None	