

STATE OF COLORADO

DIVISION OF RECLAMATION, MINING AND SAFETY Department of Natural Resources

1313 Sherman St., Room 215
Denver, Colorado 80203
Phone: (303) 866-3567
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April 2, 2013

Mr. Florentino Vuelvas
Shell Exploration and Production Company
Shell Technology Center – Houston – M1074A
3333 Highway 6 South
Houston, TX 77082-3101

John W. Hickenlooper
Governor

Mike King
Executive Director

Loretta Piñeda
Director

Re: Shell Frontier Oil & Gas Inc., Notice of Intent (NOI) P-2010-026, Modification No. 3 Request Approval.

Mr. Vuelvas:

The Division of Reclamation, Mining and Safety has completed the review of the above referenced Notice of Intent modification application. It appears that the request meets the requirements of the Act and Rules. Therefore, staff is pleased to inform Shell Frontier Oil and Gas Inc. that Modification No. 3 is approved.

Modification No. 3 addresses the following:

- Construction of a 3 horizontal heater wells and 1 angled producer well.

The terms of the Modification No. 3 approved by the Division are hereby incorporated into Permit No. P-2010-026. All other conditions and requirements of Permit No. P-2010-026 remain in full force and effect.

The Division currently holds a statewide reclamation bond of \$28,000,000.00 for prospecting on public land which is adequate to reclaim the site.

If you need additional information, please contact me at the Division of Reclamation, Mining and Safety, Grand Junction Field Office, 101 S. 3rd St., Suite 301, Grand Junction, Colorado 81501, telephone no. 970.241.2042.

Sincerely,

A handwritten signature in black ink, appearing to read "Travis Marshall".

Travis Marshall
Environmental Protection Specialist

cc: Russ Means, DRMS

Paul Daggett
BLM – White River Field Office
220 E. Market Street
Meeker, CO 81641

Enclosure(s): Update Reclamation Cost Estimate

COST SUMMARY WORK

Task description: **Reclamation Cost Estimate**

Site: **Multi-Mineral RDD Lease**

Permit Action: **Reclamation
Cost Estimate**

Permit/Job#: **P2010026**

PROJECT IDENTIFICATION

Task #: **001**

State: **Colorado**

Abbreviation: **None**

Date: **8/10/2011**

County: **Rio Blanco**

Filename: **P026-001**

User: **THM**

Agency or organization name: **DRMS**

TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
01a	Demolition and Disposal	DEMOLISH	1	0.00	\$543,198.48
02a	Seal all open boreholes per regulatory requirements	BOREHOLE	1	415.53	\$974,751.77
03a	Backfill and regrade storm water pond	DOZER	3	1.88	\$967.91
04a	Regrade site (excluding pond and access road)	DOZER	3	51.70	\$26,666.52
05a	Regrade site access road	DOZER	3	13.33	\$6,877.53
06a	Rip all regraded surfaces to a depth of 18 inches prior to s	RIPPER	3	6.12	\$3,161.00
07a	Replace stockpiled topsoil over 12.2 acres	SCRAPER1	1	33.33	\$18,494.17
08a	Pinyon Pine / Utah Juniper 3.91 acres	REVEGE	1	0.00	\$13,719.13
08b	Revegetate 6.66 acres mid-slope community	REVEGE	1	6.66	\$9,846.54
08c	Revegetate 1.63 acres of upland drainage community	REVEGE	1	1.63	\$3,568.75
09a	Mobilization	MOBILIZE	1	8.00	\$13,587.89
<u>SUBTOTALS:</u>				538.18	\$1,614,839.69

INDIRECT COSTS

OVERHEAD AND PROFIT:

Liability insurance: 2.02%

Total = \$32,619.76

Performance bond: 1.05%

Total = \$16,955.82

Job superintendent: 674.52 hrs

Total = \$44,120.35

Profit: 10.00%

Total = \$161,483.97

TOTAL O & P = \$255,179.90

CONTRACT AMOUNT (direct + O & P) = \$1,870,019.59

LEGAL - ENGINEERING - PROJECT MANAGEMENT:

Financial warranty processing (legal/related costs): 500.00

Total = 500.00

Engineering work and/or contract/bid preparation: 4.25%

Total = \$79,475.83

Reclamation management and/or administration: 5.00%

\$93,500.98

CONTINGENCY: 3.00

Total = \$48,445.19

TOTAL INDIRECT COST = \$477,101.90

TOTAL BOND AMOUNT (direct + indirect) = \$2,091,941.59

BOREHOLE SEALING WORK

Task description: Seal all open boreholes per regulatory requirements

Site: Multi-Mineral RDD Lease

Permit Action: Reclamation Cost
Estimate

Permit/Job#: P2010026

PROJECT IDENTIFICATION

Task #: 02A
Date: 8/9/2011
User: THM

State: Colorado
County: Rio Blanco

Abbreviation: None
Filename: P026-02a

Agency or organization name: DRMS

UNIT COSTS

Borehole Description	Sealing/Item Method	Diameter	Length	Quantity	Unit	Unit Cost	Total Cost
East RDD heater hole #1	Portland cement grout - 8 in. (labor, equip, materials)	7.125	2285	2,285.00	LF	\$11.88	\$27,139.40
East RDD heater hole #2	Portland cement grout - 8 in. (labor, equip, materials)	7.125	2285	2,285.00	LF	\$11.88	\$27,139.40
East RDD heater hole #3	Portland cement grout - 8 in. (labor, equip, materials)	7.125	2285	2,285.00	LF	\$11.88	\$27,139.40
East RDD heater hole #4	Portland cement grout - 8 in. (labor, equip, materials)	7.125	2285	2,285.00	LF	\$11.88	\$27,139.40
East RDD heater hole #5	Portland cement grout - 8 in. (labor, equip, materials)	7.125	2285	2,285.00	LF	\$11.88	\$27,139.40
East RDD heater hole #6	Portland cement grout - 8 in. (labor, equip, materials)	7.125	2285	2,285.00	LF	\$11.88	\$27,139.40
East RDD heater hole #7	Portland cement grout - 8 in. (labor, equip, materials)	7.125	2285	2,285.00	LF	\$11.88	\$27,139.40
East RDD heater hole #8	Portland cement grout - 8 in. (labor, equip, materials)	7.125	2285	2,285.00	LF	\$11.88	\$27,139.40
East RDD heater hole #9	Portland cement grout - 8 in. (labor, equip, materials)	7.125	2285	2,285.00	LF	\$11.88	\$27,139.40
East RDD heater hole #10	Portland cement grout - 8 in. (labor, equip, materials)	7.125	2285	2,285.00	LF	\$11.88	\$27,139.40
East RDD heater hole #11	Portland cement grout - 8 in. (labor, equip, materials)	7.125	2285	2,285.00	LF	\$11.88	\$27,139.40
East RDD heater hole #12	Portland cement grout - 8 in. (labor, equip, materials)	7.125	2285	2,285.00	LF	\$11.88	\$27,139.40
East RDD heater hole #13	Portland cement grout - 8 in. (labor, equip, materials)	7.125	2285	2,285.00	LF	\$11.88	\$27,139.40
Costs associated with stuck heater	USER PROVIDED ITEM	NA	NA	13.00	EA	\$18,876.00	\$245,388.00
East RDD	Portland cement grout -	7.125	2285	2,285.00	LF	\$11.88	\$27,139.40

producer hole #1	8 in. (labor, equip, materials)						
East RDD producer hole #2	Portland cement grout - 8 in. (labor, equip, materials)	7.125	2285	2,285.00	LF	\$11.88	\$27,139.40
East RDD observer hole #1	Portland cement grout - 8 in. (labor, equip, materials)	7.125	2285	2,285.00	LF	\$11.88	\$27,139.40
East RDD observer hole #2	Portland cement grout - 8 in. (labor, equip, materials)	7.125	2285	2,285.00	LF	\$11.88	\$27,139.40
East RDD Observer hole #3	Portland cement grout - 8 in. (labor, equip, materials)	7.125	2285	2,285.00	LF	\$11.88	\$27,139.40
East RDD observer hole #4	Portland cement grout - 8 in. (labor, equip, materials)	7.125	2285	2,285.00	LF	\$11.88	\$27,139.40
East RDD observer hole #5	Portland cement grout - 8 in. (labor, equip, materials)	7.125	2285	2,285.00	LF	\$11.88	\$27,139.40
East RDD observer hole #6	Portland cement grout - 8 in. (labor, equip, materials)	7.125	2285	2,285.00	LF	\$11.88	\$27,139.40
Surface casing removal	Exposed casing removal - 8 to 14 in. diameter steel pipe (LF)	15-20 in.	63	63.00	LF	\$8.81	\$555.03
LHW-8117	Portland cement grout - 8 in. (labor, equip, materials)	8.5	3220	3,220.00	LF	\$11.88	\$38,244.58
LHW-8118	Portland cement grout - 8 in. (labor, equip, materials)	8.5	3300	3,300.00	LF	\$11.88	\$39,194.76
LHW-8119	Portland cement grout - 8 in. (labor, equip, materials)	8.5	3400	3,400.00	LF	\$11.88	\$40,382.48
VW-8129	Portland cement grout - 8 in. (labor, equip, materials)	8.5	3457	3,457.00	LF	\$11.88	\$41,059.48

Job Hours: 415.53Total Cost: \$974,751.73