

# 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  
FAX: (303) 832-8106



John W. Hickenlooper  
Governor

Mike King  
Executive Director

Loretta E. Piñeda  
Director

November 19, 2012

Mr. Roger Day  
American Shale Oil, LLC  
P.O. Box 1470  
Rifle, CO 81650

***Re: American Shale Oil, LLC. RD &D Project, Notice of Intent (NOI) P-2008-046, Notice of Deficiency, MD-08.***

Dear Mr. Day,

The Division of Reclamation, Mining and Safety (DRMS) has reviewed the request for a modification to the Notice of Intent to Conduct Prospecting Operations (NOI), No. P-2008-046, submitted by American Shale Oil, LLC on October 25, 2012. The modification cannot be approved until the following issue is adequately addressed.

- The additional required reclamation bond must be submitted. Due to the proposed additional reclamation liability associated the reclamation bond has been increased to \$792,391.42.

This letter shall not be construed to mean that there are no other technical deficiencies in your request for modification. Per Rule 5.1.3(c) the operator must address all identified deficiencies or complexities within sixty (60) days of the Office notification. Please submit a response to the issue as soon as possible but no later than January 7, 2012 so the deadline of January 18, 2013 can be met. If your response or a written request for an extension is not received by January 7, 2013 then the request for the modification may be denied.

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

ec: Russ Means, DRMS

## COST SUMMARY WORK

Task description: 001

Site: AMSO RD&D Project-Phase 1

Permit Action: MD-08

Permit/Job#: P2008046

### PROJECT IDENTIFICATION

Task #: 001

State: Colorado

Abbreviation: None

Date: 11/4/2011

County: Rio Blanco

Filename: P046-001

User: THM

Agency or organization name: DRMS

### TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
01a	Borehole Plugging and Abandonment	BOREHOLE	1	235.00	\$452,150.63
02a	Demolition and removal of materials and structures	DEMOLISH	1	0.00	\$61,924.72
03a	Establish final grade on test pad and access roads	DOZER	2	168.26	\$55,540.97
04a	Establish final grade on TM pad	DOZER	1	53.99	\$8,910.04
05a	Establish final grade on HB Pad	DOZER	2	37.21	\$12,281.64
06a	Establish final grade on MWP Pad	DOZER	2	19.99	\$6,597.35
07a	Establish final grade on MWP2 Pad	DOZER	2	29.53	\$9,747.33
08a	Rip 1.4 acres of access road	RIPPER	1	2.61	\$431.00
09a	Replace topsoil over 5.8 acre Test Pad and access roads	DOZER	1	19.82	\$3,270.51
10a	Spread topsoil over 2.9 acre TM Pad	DOZER	1	6.22	\$1,026.84
11a	Spread topsoil over 1.2 acre MWP Pad	DOZER	1	3.05	\$503.81
12a	Spread topsoil over 1.7 acre MWP2 Pad and road	DOZER	1	4.32	\$713.73
13a	Spread topsoil over 1.5 acres HB Pad and road	DOZER	1	4.25	\$702.24
14a	Revegetate 13.6 acres	REVEGE	1	24.00	\$17,220.92
15a	Mobilization	MOBILIZE	1	6.50	\$4,231.97
<b>SUBTOTALS:</b>				<b>614.75</b>	<b>\$635,253.70</b>

### INDIRECT COSTS

#### OVERHEAD AND PROFIT:

Liability insurance: 2.02%

Total = \$12,832.12

Performance bond: 1.05%

Total = \$6,670.16

Job superintendent: 307.37 hrs

Total = \$18,227.04

Profit: 10.00%

Total = \$63,525.37

TOTAL O & P = \$101,254.69

CONTRACT AMOUNT (direct + O & P) = \$736,508.39

#### LEGAL - ENGINEERING - PROJECT MANAGEMENT:

Financial warranty processing (legal/related costs): 0.00

Total = 0.00

Engineering work and/or contract/bid preparation: 0.00%

Total = \$0.00

Reclamation management and/or administration: 5.00%

\$36,825.42

CONTINGENCY: 3.00

Total = \$19,057.61

TOTAL INDIRECT COST = \$157,137.72

## DEMOLITION WORK

Task description: Demolition and removal of materials and structures

Site: 1 **AMSO RD&D Project-Phase**

Permit Action: MD-08

Permit/Job#: P2008046

### PROJECT IDENTIFICATION

Task #: 02A  
Date: 11/4/2011  
User: THM

State: Colorado  
County: Rio Blanco

Abbreviation: None  
Filename: P046-02a

Agency or organization name: DRMS

### UNIT COSTS

Location adjustment: 91.30 %

Structure or Item Description	Dimensions	Demolition Menu Selection	Quantity	Unit	Unit Cost	Total Cost
18" x 16' culvert	18" x 16'	Pipe, corrugated metal (CMP) - 18 in. diameter pipe	64.00	LF	\$2.34	\$149.76
Gate at entrance of well pads	15'L x 5'h	USER PROVIDED ITEM	4.00	EA	\$100.00	\$400.00
Diesel Tank	8'H x 25'L	Haul tank to certified salvage dump - 9,000 to 12,000 gal. tank	1.00	EA	\$950.00	\$950.00
Drilling fluid tank	8'H x 20'L	Haul tank to certified salvage dump - 9,000 to 12,000 gal. tank	1.00	EA	\$950.00	\$950.00
Propane tanks	4' x 10'L	Haul tank to certified salvage dump - 3,000 to 5,000 gal. tank	4.00	EA	\$710.00	\$2,840.00
Incinerator	15'H x 10'L x 8'W	Plant (1S) demo./off-site disposal in approved landfill - Max. 60 mile haul	1,200.00	CF	\$1.27	\$1,527.60
Skids	8'W x 40'L	Plant (1S) demo./off-site disposal in approved landfill - Max. 60 mile haul	640.00	CF	\$1.27	\$814.72
Process Building	40'W x 50'L x 16'H	Plant (1C) demo./off-site disposal in approved landfill - Max. 60 mile haul	32,000.00	CF	\$1.32	\$42,304.00
Concrete Footers	211 CY	Demo. and on-site disposal in existing pit, 1.5 ft. x 2 ft. - Max. 10,000 ft. haul	150.00	LF	\$9.60	\$1,440.00
Misc. tanks and piping	various sizes	Loading and 5 mile haul, salvage allowed - Steel frame structures	575.00	CY	\$8.78	\$5,048.50
Demo. 1/4 mile 3 phase Power Line	1/4 mile 3 phase PL	Powerline or utility line, overhead, wood - Double or "H" pole	1,320.00	LF	\$5.23	\$6,900.96
Demo. 40' H Comm. tower Inc. conc. footers	40' H	USER PROVIDED ITEM	40.00	LF	\$25.00	\$1,000.00
Removal of ISDS system	2000gal	USER PROVIDED ITEM	1.00		\$3,500.00	\$3,500.00