

**District I**  
1625 N. French Dr., Hobbs, NM 88240  
Phone: (575) 393-6161 Fax: (575) 393-0720

**District II**  
811 S. First St., Artesia, NM 88210  
Phone: (575) 748-1283 Fax: (575) 748-9720

**District III**  
1000 Rio Brazos Road, Aztec, NM 87410  
Phone: (505) 334-6178 Fax: (505) 334-6170

**District IV**  
1220 S. St. Francis Dr., Santa Fe, NM 87505  
Phone: (505) 476-3460 Fax: (505) 476-3462

**State of New Mexico**  
**Energy Minerals and Natural Resources**  
**Oil Conservation Division**  
**1220 South St. Francis Dr.**  
**Santa Fe, NM 87505**

Form C-101  
Revised November 14, 2012

☐ AMENDED REPORT

**APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE**

<sup>1</sup> Operator Name and Address Alta Mesa Services, LP 15021 Katy Freeway Suite 400 Houston, TX 77094		<sup>2</sup> OGRID Number 295752
		<sup>3</sup> API Number 30-019-20141
<sup>4</sup> Property Code 39708	<sup>5</sup> Property Name SINGLETON PROPERTIES LLC	<sup>6</sup> Well No. LATIGO RANCH 33-F

**<sup>7</sup> Surface Location**

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County
F	33	11 N	23 E		±2252	NORTH	±2487	WEST	GUADALUPE

**<sup>8</sup> Proposed Bottom Hole Location**

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County

**<sup>9</sup> Pool Information**

Pool Name CUERVO HILL; PENNSYLVANIAN	Pool Code 97811
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**Additional Well Information**

<sup>11</sup> Work Type N	<sup>12</sup> Well Type G	<sup>13</sup> Cable/Rotary R	<sup>14</sup> Lease Type P	<sup>15</sup> Ground Level Elevation 4755.0
<sup>16</sup> Multiple No	<sup>17</sup> Proposed Depth 18,000	<sup>18</sup> Formation PENNSYLVANIAN	<sup>19</sup> Contractor NABORS DRILLING	<sup>20</sup> Spud Date MARCH 1 <sup>ST</sup> , 2013
Depth to Ground water ~900 feet (Santa Rosa aquifer)		Distance from nearest fresh water well ~4,700 feet (Latigo Ranch 2-34 water well)		Distance to nearest surface water ~350 feet (ephemeral earthen stock tank)

**<sup>21</sup> Proposed Casing and Cement Program**

Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
Conductor	30-inch	20-inch	Conductor	120 feet (BGL)	NA	0 feet
Surface	17.50-inch	13.375-inch	54.5 #	1500 feet	1337	0 feet
Intermediate	12.25-inch	9.625-inch	47.0#	10000 feet	885	6000 feet
Production	8.50-inch	5.5-inch	20.0#	18000 feet	1192	9500 feet

**Casing/Cement Program: Additional Comments**

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**<sup>22</sup> Proposed Blowout Prevention Program**

Type	Working Pressure	Test Pressure	Manufacturer
Annular - GK	5,000 psi	2,500 psi	Hydril
Double Ram	10,000 psi	10,000 psi	Cameron
Single Ram	10,000 psi	10,000 psi	Cameron

Attachment A Latigo Ranch 33-F Drilling & Completion Plan  
Attachment A1 Lithology  
Attachment A2 Preliminary Drilling Program  
Attachment A3 Nabors BOP Stack Diagram  
Attachment B Latigo Ranch 33-F Surface Use Plan  
Attachment C Flare System  
Attachment D Flare System Rig Layout

OIL CONSERVATION COMMISSION TO BE NOTIFIED  
WITHIN 24 HOURS OF BEGINNING OPERATIONS

<p>23. I hereby certify that the information given above is true and complete to the best of my knowledge and belief.  I further certify that I have complied with 19.15.14.9 (A) NMAC <input type="checkbox"/> and/or 19.15.14.9 (B) NMAC <input type="checkbox"/>, if applicable.  Signature: <i>Bridget Helfrich</i></p>		<p>OIL CONSERVATION DIVISION</p>	
<p>Printed name: Bridget Helfrich</p>		<p>Approved By: <i>Ed Martin</i></p>	
<p>Title: Regulatory Coordinator</p>		<p>Title: <b>DISTRICT SUPERVISOR</b></p>	
<p>E-mail Address: bhelfrich@altamesa.net</p>		<p>Approved Date: <i>2/8/2013</i>      Expiration Date: <i>2/8/2015</i></p>	
<p>Date: 02-06-2013</p>	<p>Phone: 281-943-1373</p>	<p>Conditions of Approval Attached</p>	

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Phone (505) 476-3460 Fax: (505) 476-3465

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-102  
Revised August 1, 2011

Submit one copy to appropriate  
District Office

OIL CONSERVATION DIVISION  
1220 South St. Francis Dr.  
Santa Fe, New Mexico 87505

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number <b>30-019-20141</b>	Pool Code <b>97811</b>	Pool Name <b>CUERVO HILL; PENNSYLVANIAN</b>
Property Code <b>39708</b>	Property Name <b>SINGLETON PROPERTIES LLC</b>	Well Number <b>LATIGO RANCH 33-F</b>
OGRID No. <b>295752</b>	Operator Name <b>ALTA MESA SERVICES, L.P.</b>	Elevation <b>4755'</b>

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
<b>F</b>	<b>33</b>	<b>11 N</b>	<b>23 E</b>		<b>±2252</b>	<b>NORTH</b>	<b>±2487</b>	<b>WEST</b>	<b>GUADALUPE</b>

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

Dedicated Acres <b>160</b>	Joint or Infill	Consolidation Code	Order No.
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NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED  
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

<p><b>SURFACE LOCATION</b> Lat - N 35°08'14.38" Long - W 104°30'21.27" NMSPC - N 1505331.271 E 489742.157 (NAD-83)</p>	<p><b>OPERATOR CERTIFICATION</b> I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</p> <p><i>Bridget Helfrich</i> 2-6-13 Signature Date Bridget Helfrich Printed Name bhelfrich@altamesa.net Email Address</p> <p><b>SURVEYOR CERTIFICATION</b> I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</p> <p><i>GARY L. JONES</i> Date Surveyed Signature &amp; Seal of Professional Surveyor Professional Surveyor Certificate No. Gary L. Jones 7977 BASIN SURVEYS 27964</p>
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SECTION WAS RECONSTRUCTED BY PROJECTING SECTION CORNERS  
FOUND IN SECTION 36, TOWNSHIP 11 NORTH, RANGE 23 EAST WEST  
INTO PRESTON BECK GRANT.  
SEE ATTACHED MAP.

## Latigo Ranch 33-F Drilling and Completion Plan

The well will be drilled with potable (TDS<3,000 ppm) water-based fluids from surface to the bottom of the Santa Rosa Formation ("freshwater aquifer"). Surface conductor and intermediate casing strings will be installed and cemented. Below the Santa Rosa Formation, the well will be drilled with oil-based fluids to total depth (TD). Additional intermediate strings and production casing will be installed and cemented as prescribed, with contingency casing and cementing solutions approved by the District supervisor. Hydraulic stimulation will be performed in the prospective zones, and gas and water flow testing will be conducted in individual and/or commingled zones.

### Drilling Program

- Lithology
  - Tucumcari Basin
    - This area has been the subject of limited oil & gas exploration activity
    - Approximate depths of key geologic formations are shown in Attachment A1
  - Prospective formations are in the Pennsylvanian section
- Fluid Bearing Formations
  - Potable water (400 – 1500 feet below ground surface)
  - Brackish water (1500+ feet below ground surface)
  - Natural gas/condensate (~8000 – 18,000 feet below ground surface)
- Drilling Fluids
  - Freshwater drilling fluids (see Attachment A2)
    - Potable (TDS< 3,000 ppm) water-based, 8.3-8.6 ppg, viscosifiers and LCM additives
  - Oil-based drilling fluids (see Attachment A2)
    - Diesel oil-based fluids, 8.0-9.0 ppg, lime, caustic soda, viscosifiers and LCM additives
  - Lost Circulation Materials (LCM)
    - As needed, LCM consisting of, but not limited to, cedar fibers, mica, drilling paper, graphite, walnut plug, cottonseed hulls and calcium carbonate may be introduced into the well bore
- Closed Loop System
  - A closed-loop circulating system will be used from spud to TD
  - The closed loop system will incorporate standard solids-control equipment and transport equipment
  - No local storage of cuttings will be made as cuttings will be immediately transported to a commercial disposal facility
  - The closed loop system at the well site will be operated, maintained, and optimized by dedicated personnel trained in the use of that equipment
  - Fit-for-purpose sealed transfer boxes will be used
- Wellhead Pressure Control (Blowout Prevention [BOP])
  - Wellhead BOP equipment is standard design for "tight gas" wells, as shown on Attachment A3
    - Maximum pressures for equipment (wellhead A section to be 13 5/8" 5,000 psi; wellhead B section to be 11" 10,000 psi; BOP with 13 5/8" 5,000 psi annular preventer; and with 13 5/8" 10,000 psi ram preventers)
    - Maximum downhole pressures anticipated ~6500 psi
  - BOP testing procedures conducted by third party contractor upon installation
    - Ram preventers to 10,000 psi and 250 psi; Annular preventer to 2500 psi and 250 psi, for 10 minutes and 5 minutes, respectively
- Directional Drilling
  - This well is planned as vertical; inclination added for engineering effort to simulation tortuosity

### Casing and Cementing Program

- All casing run and set will be new and unused. Details are included Table 1
- Surface Casing

- 17.50-inch diameter well bore, drilled to 1500 feet.
- 13.375-inch diameter casing installed and cemented to surface
- Intermediate Casing
  - 12.25-inch diameter well bore, drilled to 10000 feet.
  - 9.625-inch diameter casing installed and cemented to 6000 feet
- Production Casing
  - 8.5-inch diameter well bore, drilled to 18000 feet.
  - 5-inch diameter casing installed and cemented to 9500 feet

## **Well Completion**

- Casing Perforation
  - Perforate casing in prospective sand zones, using six shots per foot (spf), 60 degree, phased perforating guns
- Hydraulic Fracturing
  - Treat prospective sand zones with ceramic and/or sand proppant materials during hydraulic fracturing

## **Logging and Testing**

- Lithologic Logging
  - Mudlogging (5000' to 18,000' TVD); Selective coring (none planned)
- Wireline-Logging, including but not limited to:
  - Gamma Ray, Resistivity, Porosity, Neutron and Sonic data collection
  - Spectroscopy, Sigma, and NMR possible
- Flow Testing
  - Flow individual production zones for up to 3 days
  - Flow entire well for up to 120 days

## **Water Supply for Drilling and Completions**

- Potable groundwater will be available from the three water wells drilled on the Latigo Ranch for the purpose of Prospecting or Development of Natural Resources (72-12-1).
  - CR 04952, 1.7 miles @ LR 3-5 location (diverted to CR05115)
  - CR 04954, 0.9 miles @ LR 2-34 location (diverted to CR 05114)
  - CR 05066, 1.6 miles @ LR 3-3 location
  - A temporary appropriation of up to 3 acre feet (AF) of potable water was previously approved by the Office of State Engineer-District 6 (OSE) for production of potable water from the Santa Rosa aquifer in each of those three wells. This appropriation will be renewed with the OSE.
- Potable groundwater will be available from the water well drilled on the Webb Ranch for the purpose of Prospecting or Development of Natural Resources (72-12-1).
  - CR 04940, 2.6 miles @ WR 3-23 location
  - A temporary appropriation of up to 3 acre feet (AF) of potable water was previously approved by the Office of State Engineer-District 6 (OSE) for production of potable water from the Santa Rosa aquifer in that well. This appropriation will be renewed with the OSE.

## Lithology

Wellsite elevation is 4761'

Significant Formation Tops	Drill Depth	Subsea Depth
Santa Rosa	930	3831
San Andres	1625	3136
Glorietta	2010	2751
Yeso	2340	2421
Abo	3540	1221
Hueco	4430	331
Pennsylvanian	6000	-1239
Mississippian	17600	-12839
Basement	17900	-13139

## Preliminary Drilling Program

### Lease and Well Name:

Latigo Ranch 33-F

### Location:

Cuervo, NM	35° 01' 57.27"N 104° 24' 27.50"W
Lease Entrance	35° 06' 52.34"N 104° 24' 29.91"W
Latigo Ranch Turn	35° 08' 36.31"N 104° 27' 41.15"W
Well Site	35° 08' 14.38"N 104° 30' 21.27"W



### Directions:

From Tucumcari, take Interstate 40 West. Take Exit 291 toward Cuervo. Turn left onto I-40 Frontage Road. Go 0.3 miles and take a right onto County Road I E. Cross the railroad tracks and take the slight right to continue on County Road I E. Continue for 5.7 miles. Turn left onto lease road. Go 4.8 miles and take left to enter Latigo Ranch. Go 3.5 miles and rig will be on South side of the lease road.

From Santa Rosa, take Interstate 40 East. Take Exit 291 toward Cuervo. Turn left toward Co RD 2 C. Turn left onto Co Rd 2C, go under I-40 and take right onto I-40 Frontage road. Go 0.31 miles and take a left onto Co Rd I E. Cross the railroad tracks and take the slight right to continue on County Road I E. Continue for 5.7 miles. Turn left onto lease road. Go 4.8 miles and take left to enter Latigo Ranch. Go 3.5 miles and rig will be on South side of the lease road.





# Wellbore Schematic

REV 3.0

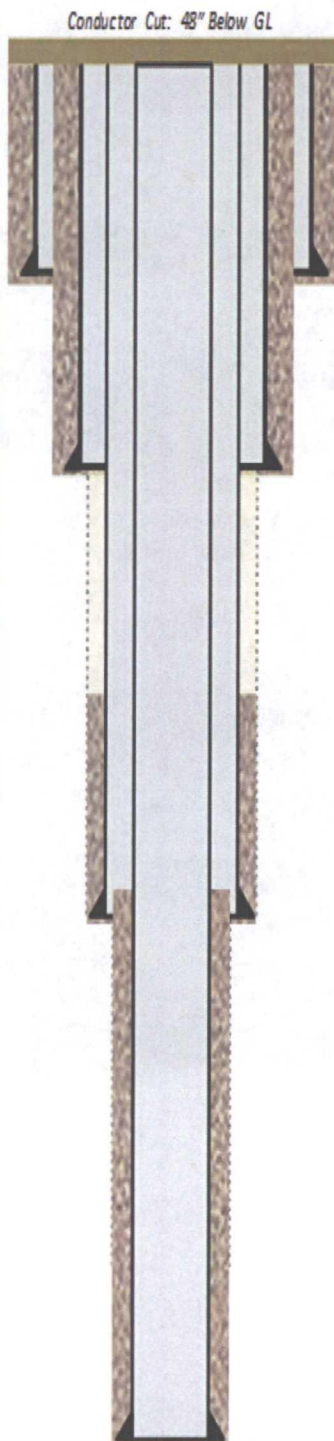
Prepared by: Alexis Husser

February 1<sup>st</sup>, 2013

## Alta Mesa Services, LP Cuervo - Guadalupe County, NM Latigo Ranch 33-F - Proposed Wellbore Schematic

Depth Reference: Drill Floor  
Drill Floor above GL: 30'  
GL Elevation above MSL: 4755.0'

Bit & Directional	Evaluation	PP / FG
		PPG
24" Auger Vertical	None	8.4/8.9
17 1/4" Milled Tooth Vertical Drilled To: 1,500' / 1,500'	None	8.4/13.5
12 1/4" PDCw/PDM & RSS Vertical Hold  Drilled To: 10,000' / 10,000'	MWD  WL: PEX & Sonic	
8 1/2" PDCw/PDM & RSS Vertical Hold  Drilled To: 18,000' / 18,000'	MWD Mudlogger  WL: PEX & Sonic	



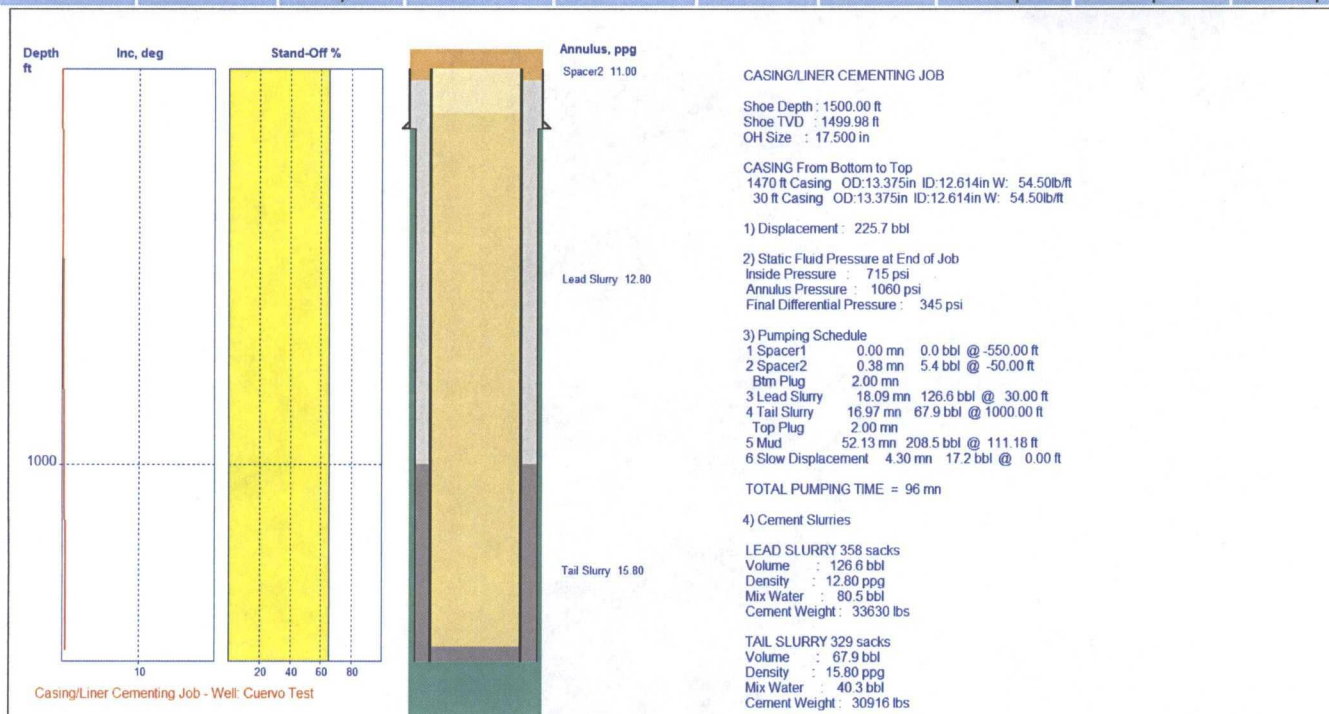
Drilling Fluid	Casing	Cement
Dry	20" Conductor 150' / 150'	Class A
Spud Mud 8.5-9.0 ppg	133/8" 54.5# J-55 STC Set @: 1,500' / 1,500'	Class A 12.8 ppg to Surface 15.8 ppg to 1,000'
DOB 8.5-9.0 ppg	9-5/8" 47.0# N80 BTC  Set @: 10,000' / 10,000'	Class A 12.0 ppg to 6,000' 13.8 ppg to 9,000'
DOB 8.5 ppg	5 1/2" 20.0# P110 BTCw/M2M seal 0 to 18000'  Set @: 18,000' / 18,000'	Class A 12.0 ppg to 9,500' Class H 15.6 ppg to 16,000'



## Casing and Cementing Details

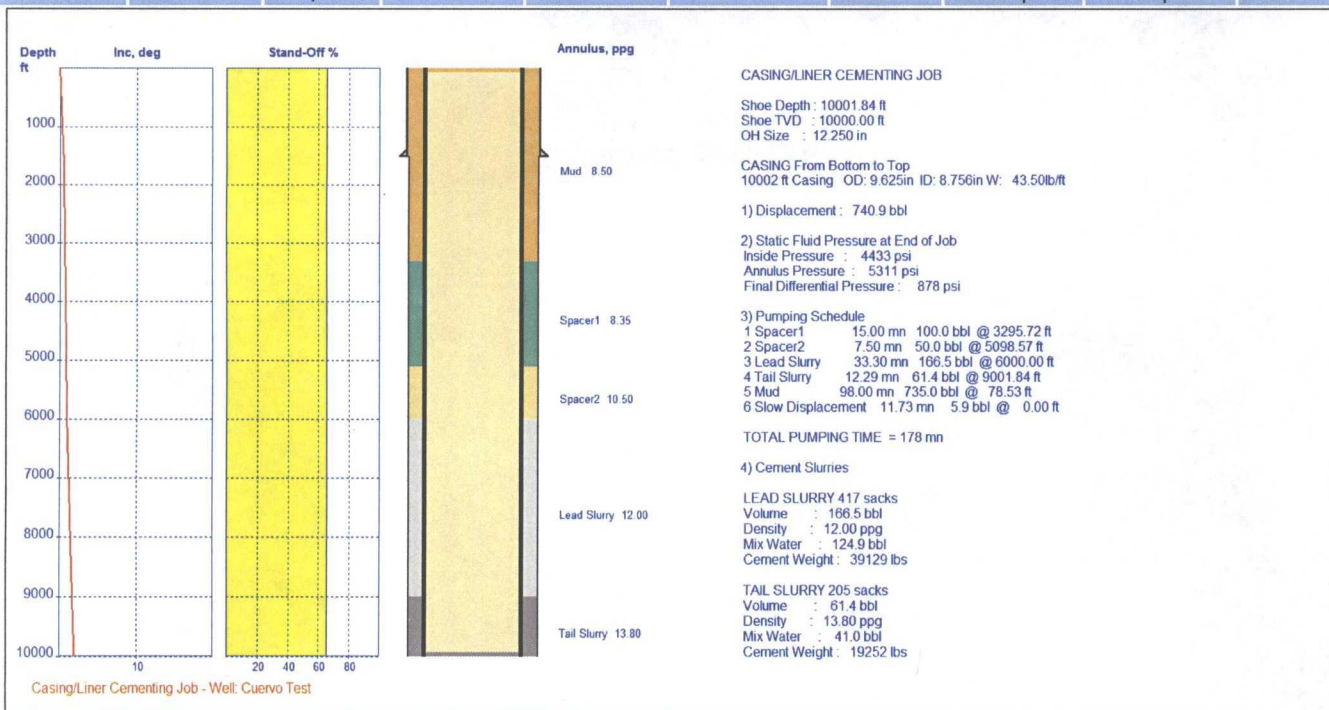
### Surface Hole

Set Depth	Top (RTE)	Size	Weight	Grade	Conn	Drift	Burst	Collapse	Tension
1500	30'	13 3/8"	54.5#	J-55	STC	12.459"	2730 psi	1130 psi	909 kips



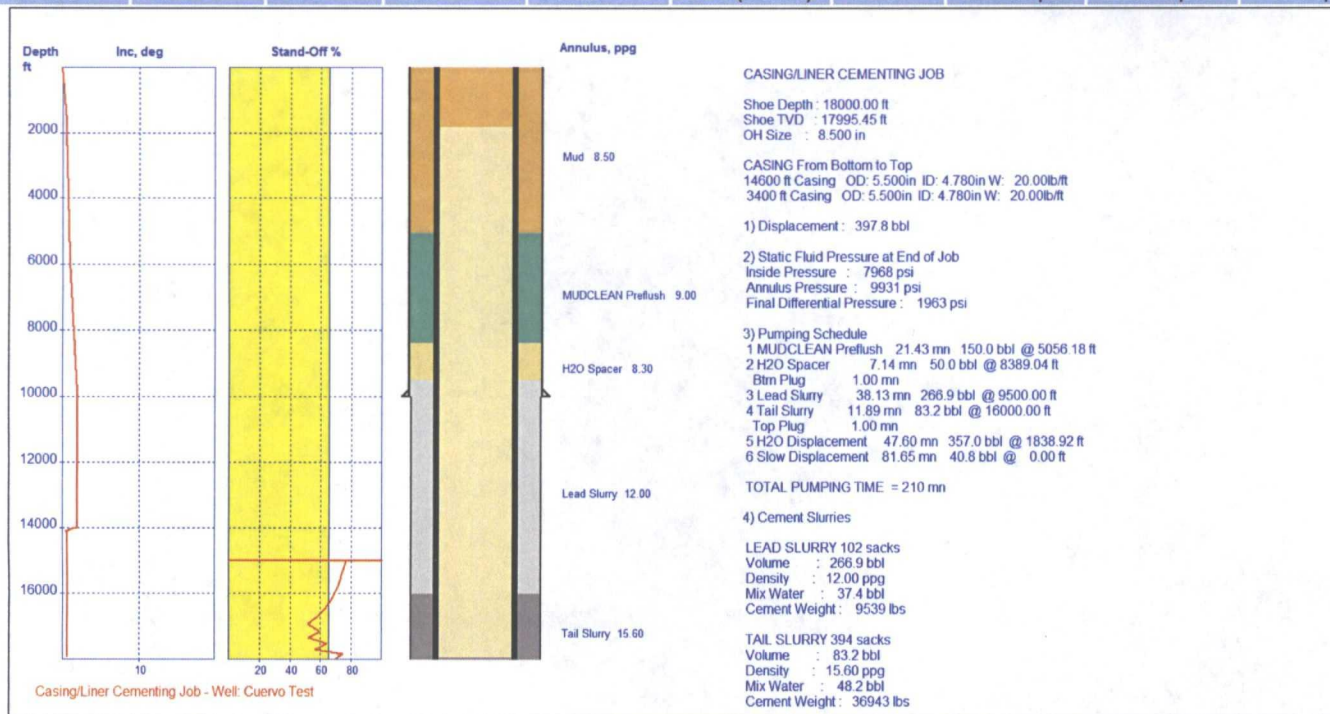
### Intermediate Hole

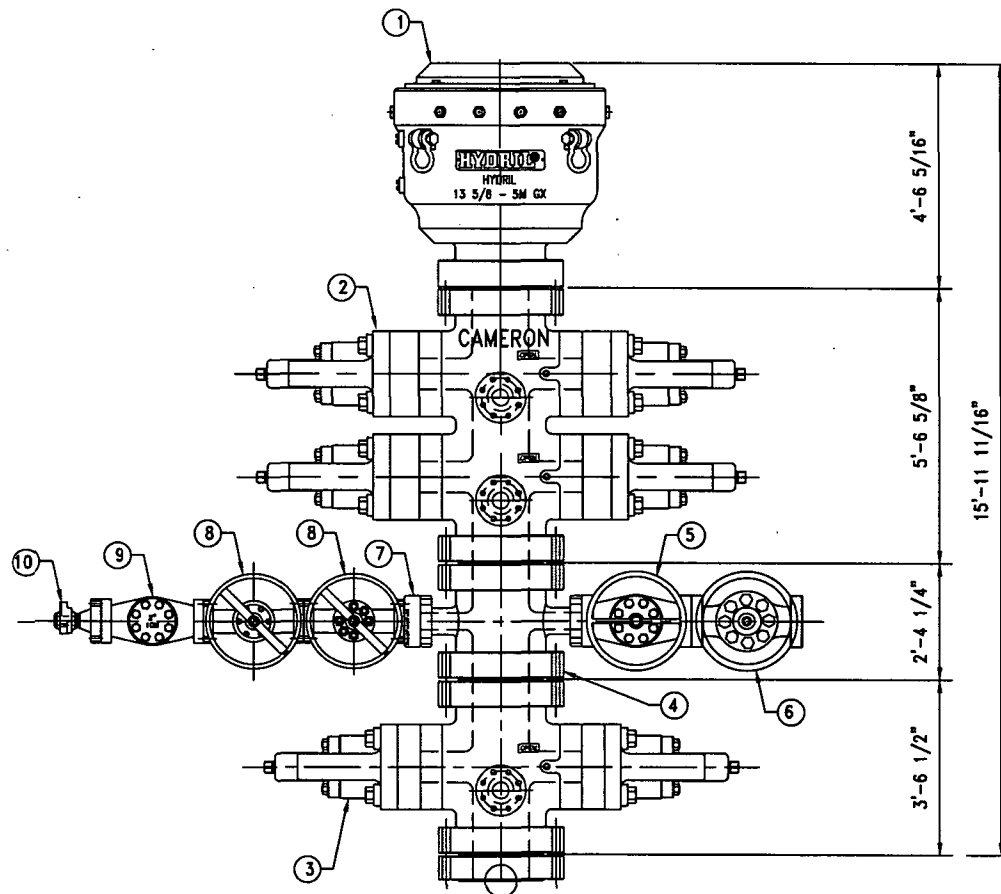
Set Depth	Top (RTE)	Size	Weight	Grade	Conn	Drift	Burst	Collapse	Tension
10000'	30'	9 5/8"	47#	N80	BTC	8.525"	6870 psi	4750 psi	1161 kips



## Production Hole

Set Depth	Top (RTE)	Size	Weight	Grade	Conn	Drift	Burst	Collapse	Tension
18000'	30'	5 1/2"	20#	P110	BTC (MTM)	4.653	12360 psi	11080 psi	667 kips





ELEVATION

# BILL OF MATERIALS

NO.	QTY	DESCRIPTION
1	1	13 5/8" 5M GX ANNULAR B.O.P. w/10M BTM FLANGE
2	1	13 5/8" 10M TYPE U DOUBLE B.O.P.
3	1	13 5/8" 10M TYPE U SINGLE BOP
4	1	13 5/8" 10M DRILL SPOOL FLG. x FLG. 4 1/16" 10M FLANGED OUTLETS (2)
5	1	4 1/16" 10M MANUAL VALVE
6	1	4 1/16" 10M HCR VALVE
7	1	DSA 4 1/16" 10M x 2 1/16" 10M
8	2	2 1/16" 10M FC MANUAL VALVE
9	1	2 1/16" 10M CHECK VALVE
10	1	2 1/16" 10M X 2" 1502 H/U X/O

TITLE COPYRIGHTED

RIG PACE 1500  
B.O.P. STACK 13 5/8-10M  
with 13 5/8-5M GX-ANNULAR

THIS DRAWING IS SHOWN TRUE SCALE ONLY WHEN PRINTED ON THIS SIZE PAPER

REV.	DESCRIPTION	DATE	BY	APP.
0				
XREF				



**NABORS**

DRW BY: EES	SCALE: NONE
DATE: 06/03/2008	APP:
ER DWG:	DWG: 1500-402

THIS DOCUMENT AND THE INFORMATION CONTAINED HEREIN IS A CONFIDENTIAL DISCLOSURE. IT IS SHOWN TO YOUR COMPANY WITH THE UNDERSTANDING IT IS NOT TO BE REVEALED TO OTHERS OR USED FOR ANY PURPOSE WITHOUT THE WRITTEN CONSENT OF NABORS INDUSTRIES.

**B**

## **Latigo Ranch 33-F Surface Use Plan**

The well location, associated facilities and access roads will be constructed on fee surface, upon approval of the surface owner. Well site and access roads will be constructed to withstand the loads occurring during mobilization, placement and operation of drilling, completion and testing equipment. Construction activities will be conducted to minimize surface disturbances and to readily accommodate reclamation activities on disturbed areas.

### **Existing Roads**

- Access to Location
  - From the town of Cuervo, New Mexico
    - Drive north on County Road, about 5.9 miles
    - Follow Pipeline Corridor road west toward Webb CD-1 well location, about 2.6 miles
    - Follow Webb Ranch road, turn west, follow improved two track road west, south, and west, about 3.2 miles, to Latigo 000 well location

### **Roads to be Constructed/Maintained**

- Improved Roads
  - County Road (maintained by Guadalupe County)
    - Constructed of compacted crushed aggregate and fill
- Two-Track Roads
  - Latigo Ranch and Webb Ranch Roads
    - Existing improved 2-track road extends to Webb CD-1 well location
      - Constructed of compacted crushed aggregate and fill
      - Culverts and/or rock-filled, low water crossing installed
    - Construct improved 2-Track road segment to access Latigo 000 location adjacent to existing access road
      - Grade/crown road, placing crushed aggregate as needed
      - Install culverts and/or rock-filled, low water crossings, as needed

### **Well Site Layout**

- Well pad location and associated facilities are shown on Well Location, Latigo Ranch 33-F, Topographic Maps
  - The staked well location and proposed access road are shown on Location photos
  - Well location, water well, access roads, lined pits, above-ground tanks and temporary buildings, and storage areas are shown on Location Layout for Latigo Ranch 33-F

### **Water Supply**

- See previous section in Drilling and Completion Plan

### **Existing Oil & Gas Wells**

- Latigo Ranch 2-34 is located approximately 4700' east of the Latigo Ranch 33-F
  - Well is permanently abandoned

### **Existing and/or Proposed Facilities**

- Well Site Facilities
  - Located at well site
- Temporary living quarters
  - Located at well site

### **Storm Water Management Plan**

- Storm water management and erosion control practices will be implemented during construction, operations, and reclamations
  - To utilize surface location that minimizes impact on natural storm water flow
  - To use diversion trenches to eliminate flow of storm water onto the location

### **Waste Management and Disposal**

- Drilling fluids and cuttings and other solids will be disposed of off-site at permitted disposal facility
- Other solid wastes will be accumulated and disposed of off-site at permitted landfill

### **Produced Water Management and Disposal**

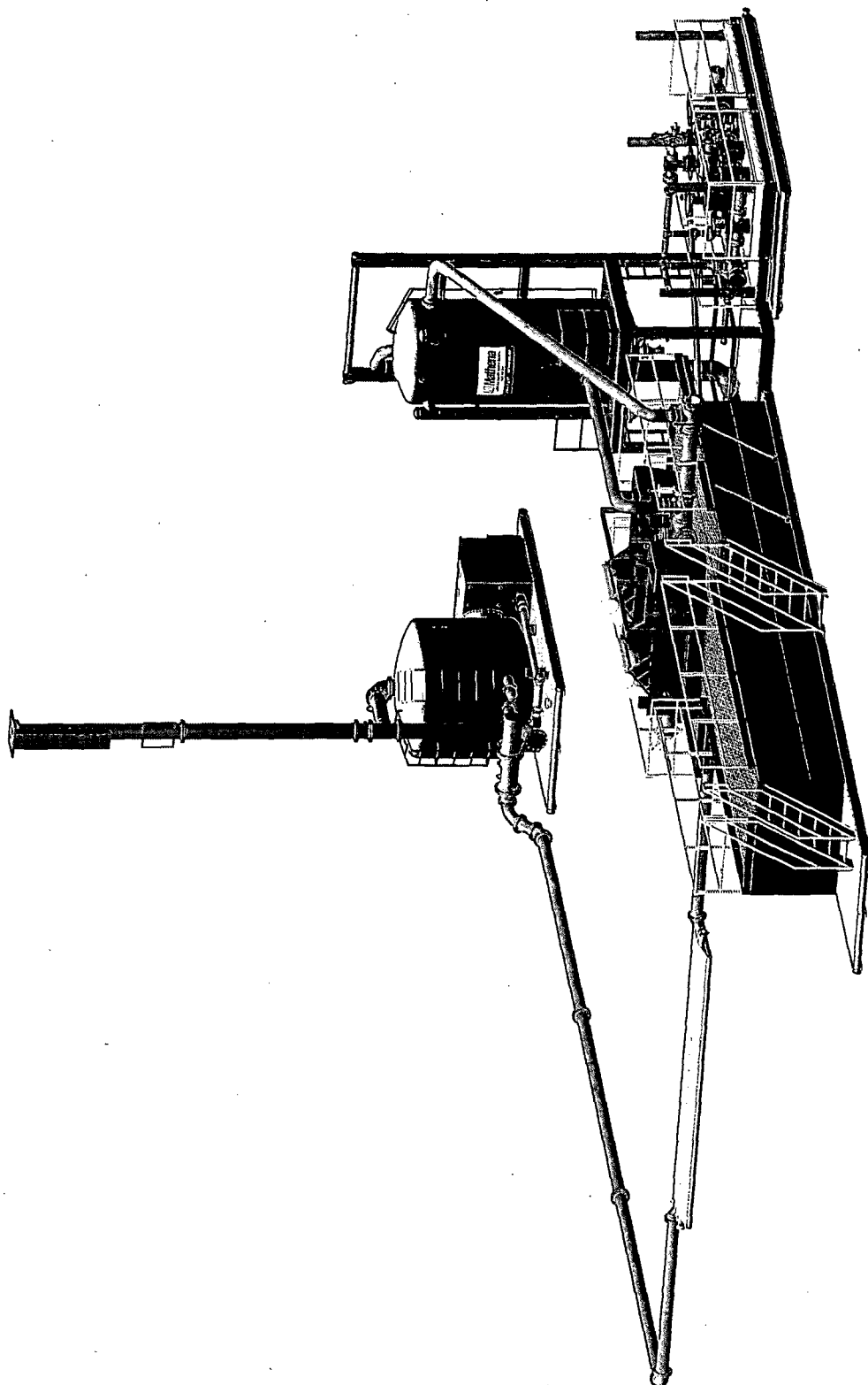
- Produced water, and hydraulic fracturing fluids will be disposed of off-site; some fluids may be treated and re-used on-site or at other well locations. Concentrated waste fluids will be disposed of off-site at permitted disposal facility

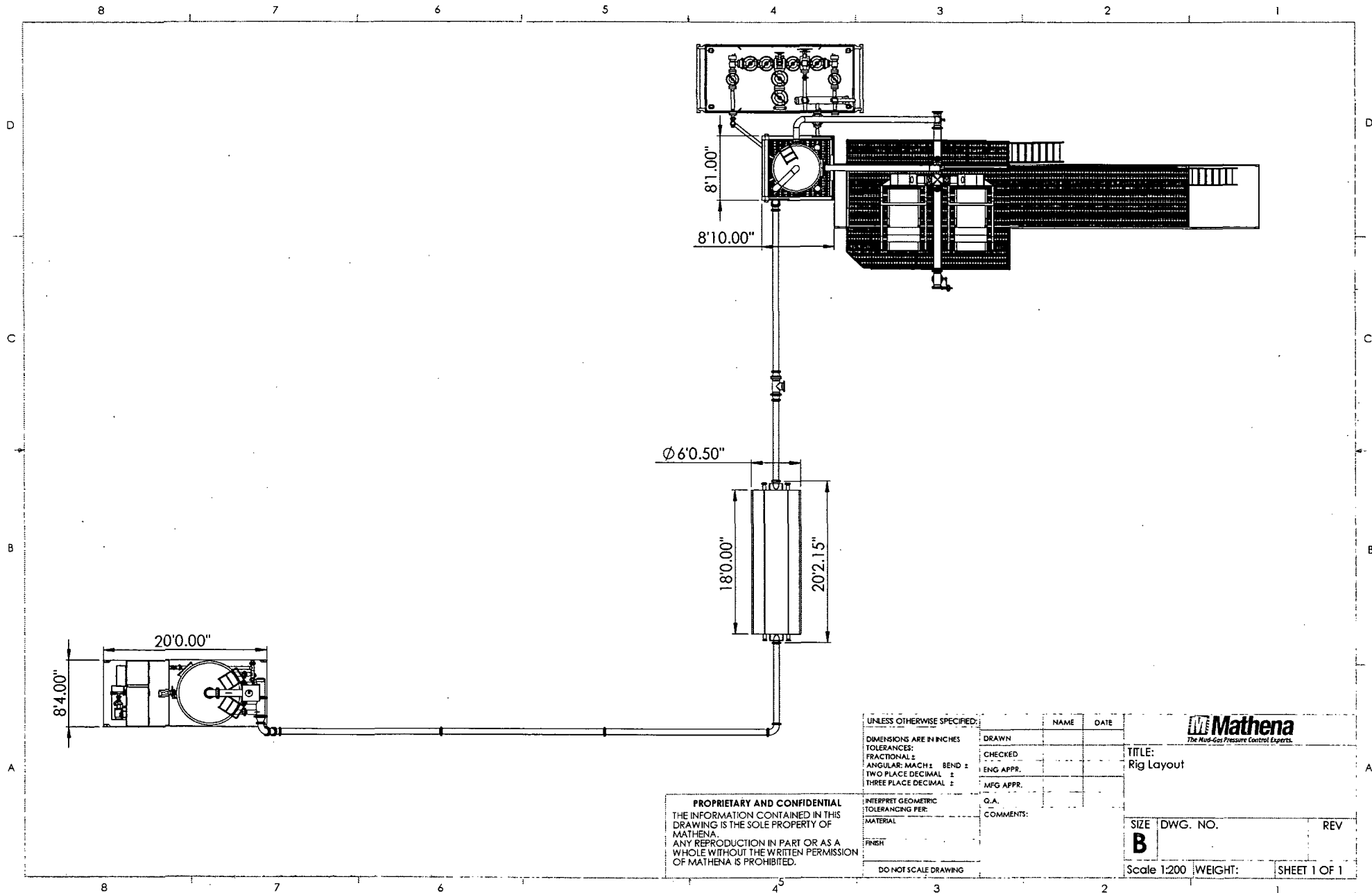
### **Construction Materials**

- Fill material and Aggregate – obtained from local sources
- Top soil – temporarily stockpiled at perimeter of well pad and along construction corridors for subsequent use during reclamation

### **Reclamation**

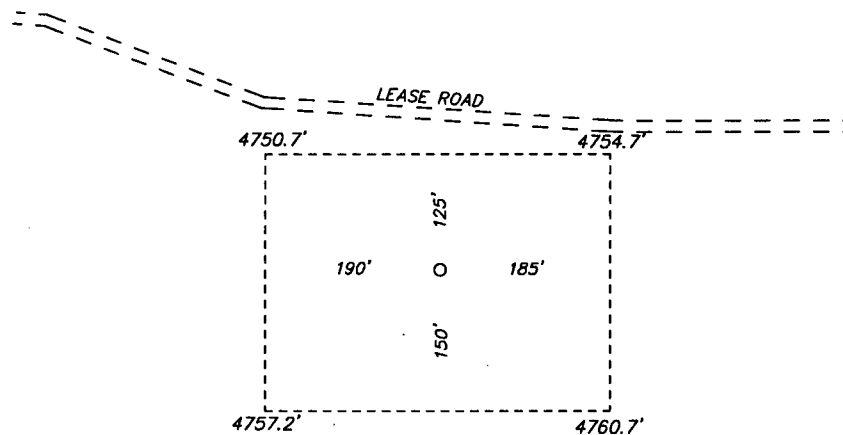
- Areas temporarily disturbed during construction, and well drilling, completion and testing will be reclaimed to original conditions, as soon as is practical and in consultation with the surface owner
  - Disturbed areas will be re-contoured to match existing topography
  - Topsoil salvaged during construction activities will be spread to a minimum thickness of 6 inches
  - Reclaimed areas will be planted with seed mixture recommended by local Soil Conservation Service and/or BLM staff, and approved by surface owner
- Areas disturbed during construction and subsequent oil & gas production will be reclaimed to original conditions as soon after oil & gas production ceases, as is practical, and in consultation with the surface owner





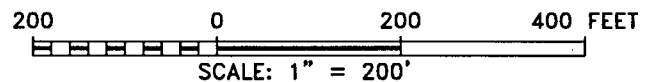


SECTION 33, TOWNSHIP 11 NORTH, RANGE 23 EAST, N.M.P.M.,  
 GUADALUPE COUNTY, WELL PAD VACINITY NEW MEXICO.



ALTA MESA SERVICES, L.P.  
 LATIGO RANCH 33-F  
 ELEV. - 4755'

Lat - N 35°08'14.38"  
 Long - W 104°30'21.27"  
 NMSPCE- N 1505331.271  
 E 489742.157  
 (NAD-83)



Directions to Location:

FROM THE VILLAGE OF CUERVO, NM, GO NORTH ON  
 CO. RD. I-E FOR 5.8 MILES TURNING WEST ON  
 LEASE ROAD FOR 4.6 MILES TO A "Y", GO WEST  
 WINDING SOUTH 2.0 MILES TO A LEASE ROAD, GO  
 WEST 1.0 MILES TO PROPOSED LOCATION.

**ALTA MESA SERVICES, L.P.**

REF: LATIGO RANCH 33-F

THE LATIGO RANCH 33-F LOCATED ±2252'  
 FROM THE NORTH LINE AND ±2487' FROM THE WEST LINE OF  
 SECTION 33, TOWNSHIP 11 NORTH, RANGE 23 EAST,  
 N.M.P.M., GUADALUPE COUNTY, NEW MEXICO.

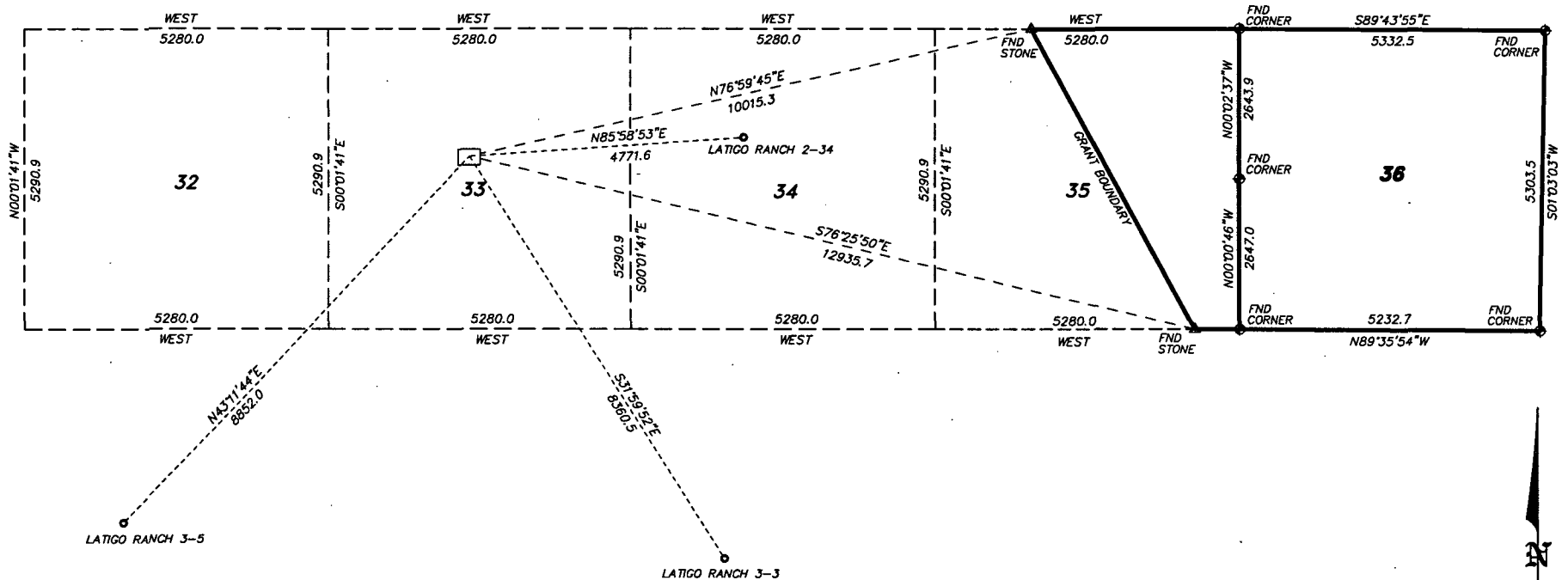
**BASIN SURVEYS** P.O. BOX 1786-HOBBS, NEW MEXICO

W.O. Number: 27964 Drawn By: J. SMALL

Date: 01-25-2013 Disk: JMS 27964

Survey Date: 01-21-2013 Sheet 2 of 7 Sheets

**SECTION 33, TOWNSHIP 11 NORTH, RANGE 23 EAST, N.M.P.M.,  
GUADALUPE COUNTY, SECTION DETAIL NEW MEXICO.**



NOT TO SCALE

**ALTA MESA SERVICES, L.P.**

REF: LATIGO RANCH 33-F

THE LATIGO RANCH 33-F LOCATED  $\pm 2252'$   
FROM THE NORTH LINE AND  $\pm 2487'$  FROM THE WEST LINE OF  
SECTION 33, TOWNSHIP 11 NORTH, RANGE 23 EAST,  
N.M.P.M., GUADALUPE COUNTY, NEW MEXICO.

ALTA MESA SERVICES, L.P.  
LATIGO RANCH 33-F  
ELEV. - 4755'

Lat - N 35°08'14.38"  
Long - W 104°30'21.27"  
NMSPCE - N 1505331.271  
E 489742.157  
(NAD-83)

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FOUND IN SECTION 36, TOWNSHIP 11 NORTH, RANGE 23 EAST WEST  
INTO PRESTON BECK GRANT.

**BASIN SURVEYS** P.O. BOX 1786 - HOBBS, NEW MEXICO

W.O. Number: 27964

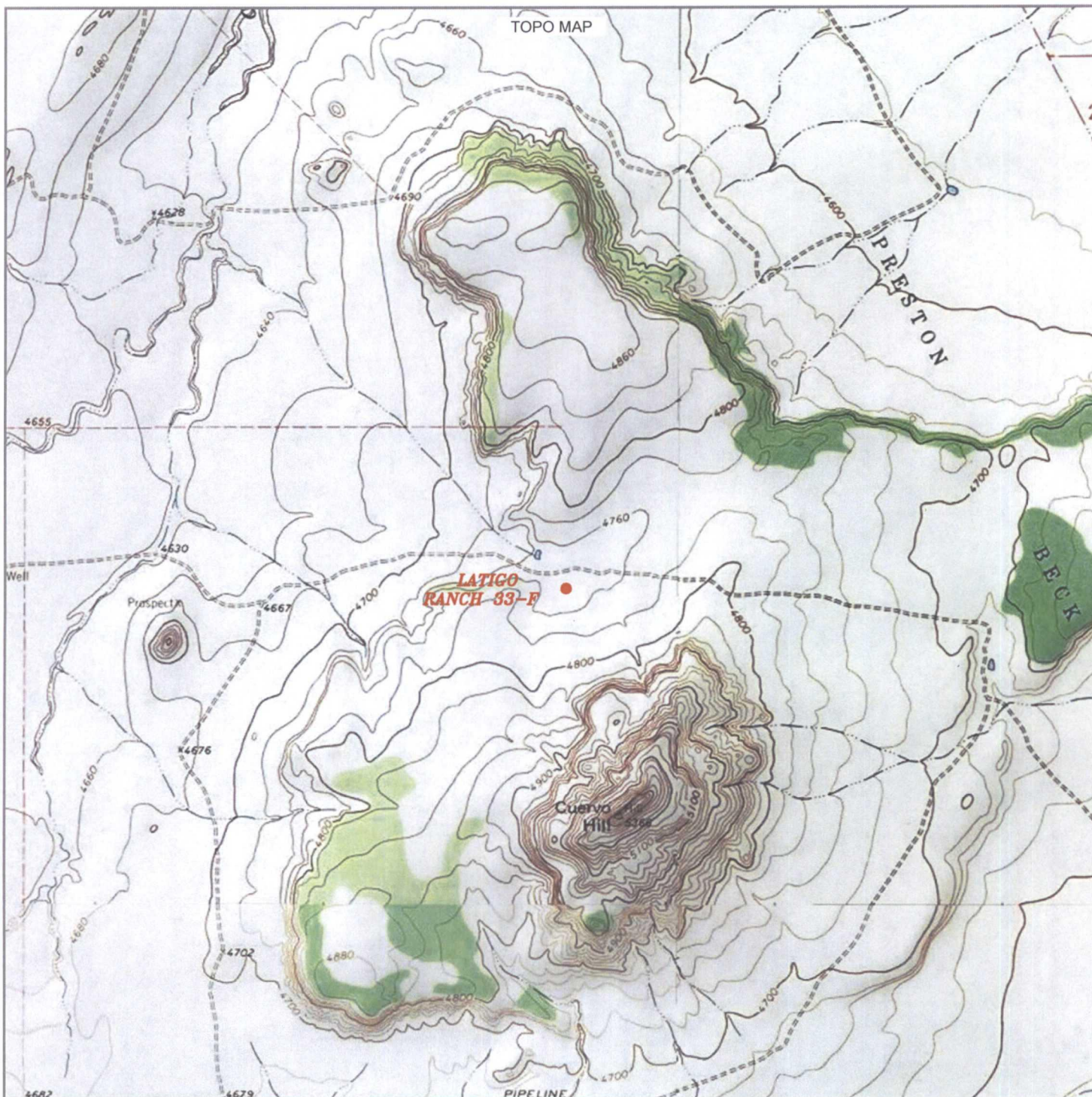
Drawn By: J. SMALL

Survey Date: 01-21-2013

Sheet 3 of 7 Sheets

Date: 01-25-2013

Disk: JMS 27964



### LATIGO RANCH 33-F

Located  $\pm 2252'$  FNL and  $\pm 2487'$  FWL  
 Section 33, Township 11 North, Range 23 East,  
 N.M.P.M., Guadalupe County, New Mexico.

**basin**  
**surveys**

focused on excellence  
 in the oilfield

P.O. Box 1786  
 1120 N. West County Rd.  
 Hobbs, New Mexico 88241  
 (575) 393-7316 - Office  
 (575) 392-2206 - Fax  
[basinsurveys.com](http://basinsurveys.com)

W.O. Number: JMS 27964

Survey Date: 01-21-2013

Scale: 1" = 2000'

Date: 01-25-2013



**ALTA MESA**  
**SERVICES, L.P.**

Sheet 4 of 7 Sheets



VACINITY MAP

CUERVO, NM

I-40

### LATIGO RANCH 33-F

Located  $\pm 2252'$  FNL and  $\pm 2487'$  FWL  
Section 33, Township 11 North, Range 23 East,  
N.M.P.M., Guadalupe County, New Mexico.



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(575) 393-7316 - Office  
(575) 392-2206 - Fax  
basinsurveys.com

W.O. Number: JMS 27964

Survey Date: 01-21-2013

Scale: 1" = 2 Miles

Date: 01-25-2013



ALTA MESA  
SERVICES, L.P.

Sheet 5 of 7 Sheets



AERIAL MAP

NS  
NS

LATIGO  
RANCH 33-F

### LATIGO RANCH 33-F

Located  $\pm 2252'$  FNL and  $\pm 2487'$  FWL  
Section 33, Township 11 North, Range 23 East,  
N.M.P.M., Guadalupe County, New Mexico.

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basinsurveys.com

W.O. Number: JMS 27964

Scale: 1" = 2000'

YELLOW TINT - USA LAND  
BLUE TINT - STATE LAND  
NATURAL COLOR - FEE LAND

ALTA MESA  
SERVICES, L.P.

Sheet 6 of 7 Sheets



PHOTOS



**LATIGO RANCH 33-F**

Located  $\pm 2252'$  FNL and  $\pm 2487'$  FWL  
 Section 33, Township 11 North, Range 23 East,  
 N.M.P.M., Guadalupe County, New Mexico.



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 basinsurveys.com

W.O. Number: JMS 27964

Survey Date: 01-21-2013

Scale: NONE

Date: 01-25-2013



**ALTA MESA  
 SERVICES, L.P.**

Sheet 7 of 7 Sheets

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
811 S. First St., Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources  
Department  
Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-144 CLEZ  
Revised August 1, 2011

For closed-loop systems that only use above ground steel tanks or haul-off bins and propose to implement waste removal for closure, submit to the appropriate NMOCD District Office.

**Closed-Loop System Permit or Closure Plan Application**

*(that only use above ground steel tanks or haul-off bins and propose to implement waste removal for closure)*

Type of action: ☒ Permit ☐ Closure

**Instructions:** Please submit one application (Form C-144 CLEZ) per individual closed-loop system request. For any application request other than for a closed-loop system that only use above ground steel tanks or haul-off bins and propose to implement waste removal for closure, please submit a Form C-144.

Please be advised that approval of this request does not relieve the operator of liability should operations result in pollution of surface water, ground water or the environment. Nor does approval relieve the operator of its responsibility to comply with any other applicable governmental authority's rules, regulations or ordinances.

1.  
Operator: ALTA MESA SERVICES, LP OGRID #: 295752  
Address: 15021 KATY FREEWAY, SUITE 400, HOUSTON TX 77094  
Facility or well name: LATIGO RANCH 33-F  
API Number: 30-019-20141 OCD Permit Number: \_\_\_\_\_  
U/L or Qtr/Qtr F Section 33 Township 11 N Range 23 E County: GUADALUPE  
Center of Proposed Design: Latitude N 35° 08' 14.38" Longitude W 104° 30' 21.27" NAD: ☐ 1927 ☒ 1983  
Surface Owner: ☐ Federal ☐ State ☒ Private ☐ Tribal Trust or Indian Allotment

2.  
☒ **Closed-loop System:** Subsection H of 19.15.17.11 NMAC  
Operation: ☒ Drilling a new well ☐ Workover or Drilling (Applies to activities which require prior approval of a permit or notice of intent) ☐ P&A  
☐ Above Ground Steel Tanks or ☒ Haul-off Bins

3.  
**Signs:** Subsection C of 19.15.17.11 NMAC  
☐ 12"x 24", 2" lettering, providing Operator's name, site location, and emergency telephone numbers  
☒ Signed in compliance with 19.15.16.8 NMAC

4.  
**Closed-loop Systems Permit Application Attachment Checklist:** Subsection B of 19.15.17.9 NMAC  
**Instructions:** Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.  
☒ Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC  
☒ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC  
☒ Closure Plan (Please complete Box 5) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC  
☐ Previously Approved Design (attach copy of design) API Number: \_\_\_\_\_  
☐ Previously Approved Operating and Maintenance Plan API Number: \_\_\_\_\_

5.  
**Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only:** (19.15.17.13.D NMAC)  
**Instructions:** Please identify the facility or facilities for the disposal of liquids, drilling fluids and drill cuttings. Use attachment if more than two facilities are required.  
Disposal Facility Name: GANDY MARLEY INC. Disposal Facility Permit Number: NMOCD 711-01-0019  
Disposal Facility Name: \_\_\_\_\_ Disposal Facility Permit Number: \_\_\_\_\_  
Will any of the proposed closed-loop system operations and associated activities occur on or in areas that will not be used for future service and operations?  
☐ Yes (If yes, please provide the information below) ☒ No  
**Required for impacted areas which will not be used for future service and operations:**  
☐ Soil Backfill and Cover Design Specifications - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC  
☐ Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC  
☐ Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

6.  
**Operator Application Certification:**  
I hereby certify that the information submitted with this application is true, accurate and complete to the best of my knowledge and belief.  
Name (Print): Bridget Helfrich Title: Regulatory Coordinator  
Signature: Bridget Helfrich Date: 02-06-2013  
e-mail address: bhelfrich@altamesa.net Telephone: 281-943-1373



7. **OCD Approval:** ☒ Permit Application (including closure plan) ☐ Closure Plan (only)

OCD Representative Signature: Ed Martin Approval Date: 2/8/2013

Title: DISTRICT SUPERVISOR OCD Permit Number: \_\_\_\_\_

8. **Closure Report (required within 60 days of closure completion):** Subsection K of 19.15.17.13 NMAC

*Instructions: Operators are required to obtain an approved closure plan prior to implementing any closure activities and submitting the closure report. The closure report is required to be submitted to the division within 60 days of the completion of the closure activities. Please do not complete this section of the form until an approved closure plan has been obtained and the closure activities have been completed.*

☐ Closure Completion Date: \_\_\_\_\_

9. **Closure Report Regarding Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only:**

*Instructions: Please indentify the facility or facilities for where the liquids, drilling fluids and drill cuttings were disposed. Use attachment if more than two facilities were utilized.*

Disposal Facility Name: \_\_\_\_\_ Disposal Facility Permit Number: \_\_\_\_\_

Disposal Facility Name: \_\_\_\_\_ Disposal Facility Permit Number: \_\_\_\_\_

Were the closed-loop system operations and associated activities performed on or in areas that *will not* be used for future service and operations?

☐ Yes (If yes, please demonstrate compliance to the items below) ☐ No

*Required for impacted areas which will not be used for future service and operations:*

☐ Site Reclamation (Photo Documentation)

☐ Soil Backfilling and Cover Installation

☐ Re-vegetation Application Rates and Seeding Technique

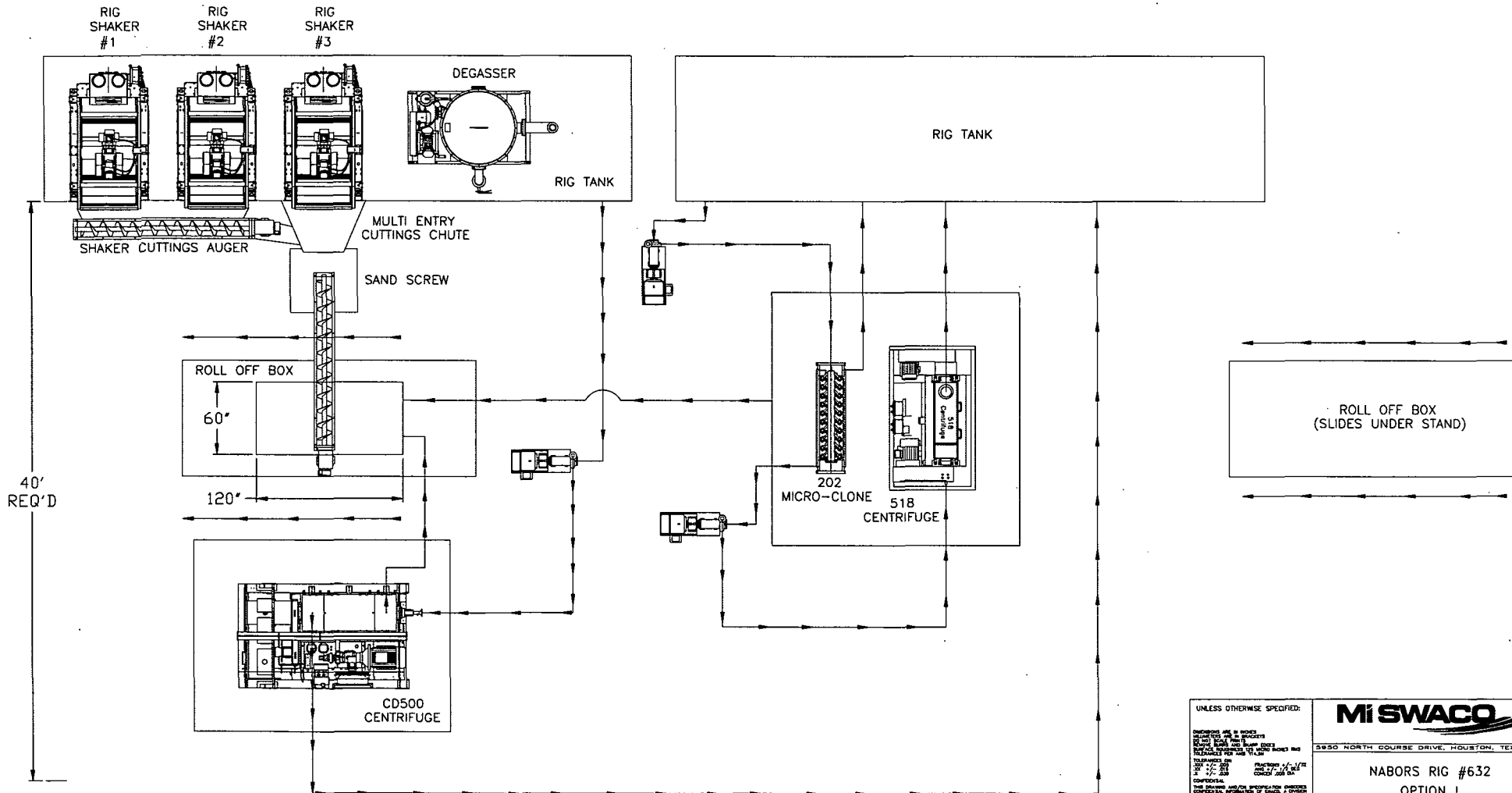
10. **Operator Closure Certification:**

I hereby certify that the information and attachments submitted with this closure report is true, accurate and complete to the best of my knowledge and belief. I also certify that the closure complies with all applicable closure requirements and conditions specified in the approved closure plan.

Name (Print): \_\_\_\_\_ Title: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

e-mail address: \_\_\_\_\_ Telephone: \_\_\_\_\_



DIMENSIONS ARE IN INCHES  
 1/2" DIA. IN BRACKETS  
 DO NOT SCALE PRINTS  
 REMOVE BURRS AND SHARP EDGES  
 BLACKENED SURFACES 175 MILS INCHES MAX  
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5950 NORTH COURSE DRIVE, HOUSTON, TEXAS 77072

NABORS RIG #632  
OPTION 1

SIZE	PLOT DATE	DWG NO.
D	1-29-2013	NALP-042-DWG-001
SCALE	NTS	DRAWN BY: T. ANDERSON
		SHEET 1 OF 1



**ALTA MESA**

February 6, 2013

New Mexico Oil Conservation Division  
District 4 – Santa Fe  
1220 South St. Francis Drive  
Santa Fe, New Mexico 87505  
Attn: Ed Martin – District Supervisor

Re: Singleton Properties LLC Latigo Ranch 33-F  
APD package

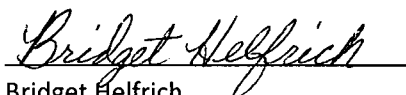
Dear Mr. Martin,

On behalf of Alta Mesa Services, LP, please find the enclosed:

1. Form C-101 with Attachments (2 pgs)
  - Attachment A = Drilling and Completion Plan (2 pgs)
  - Attachment A1 = Lithology (1 pg)
  - Attachment A2 = Preliminary Drilling Program (4 pgs)
  - Attachment A3 = Nabors BOP Stack Diagram (1 pg)
  - Attachment B = Surface Use Plan (2 pgs)
  - Attachment C = Flare System (1 pg)
  - Attachment D = Flare System Rig Layout (1 pg)
2. Form C-102 with attachments (1 pg)
  - Sheet 2 of 7 = Well Pad Vicinity (1 pg)
  - Sheet 3 of 7 = Section Detail (1 pg)
  - Sheet 4 of 7 = Topo Map (1 pg)
  - Sheet 5 of 7 = Vicinity Map (1 pg)
  - Sheet 6 of 7 = Aerial Map (1 pg)
  - Sheet 7 of 7 = Photos (1 pg)
3. Form C-144 CLEZ with CLS Rig Layout (3 pgs.)

If you have any questions or need further information, please feel free to contact me.

Sincerely,



Bridget Helfrich

Regulatory Coordinator

Alta Mesa Services, LP

Direct No. 281-943-1373

E-mail: [bhelfrich@altamesa.net](mailto:bhelfrich@altamesa.net)

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