OCD Hobbs

14-648

Form 3160-3
(March 2012)

FORM APPROVED
OMB No. 1004-0137
Expires October 31, 2014

Split Estate

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No.
SHL: Private; BHL: NM0160973; Other: NM0106040A

6. If Indian, Allotee or Tribe Name

1a. Type of Work: [X] DRILL [ ] REENTER

7. If Unit or CA Agreement, Name and No.
Red Hills Unit - NM071019X

1b. Type of Well: [X] Oil Well [ ] Gas Well [ ] Other [X] Single Zone [ ] Multiple Zone

8. Lease Name and Well No. 300545
Red Hills Unit 25H

2. Name of Operator
Cimarex Energy Co. of Colorado 162683 HOBBS OCD

9. API Well No.
30-025-42330

3a. Address
600 N. Marienfield St. Ste. 600 Midland Tx 79071

3b. Phone No. *(include area code)*
432-571-7800 DEC 09 2014

10. Field and Pool, or Exploratory 97994
Wildcat Bone Spring

4. Location of Well *(Report location clearly and in accordance with any State requirements.*)*
At Surface 330 FNL & 1330 FEL
At proposed prod. Zone 330 FSL & 2200 FEL *Bone Spring* RECEIVED

11. Sec,. T. R. M. or Blk. and Survey and Area
5, 26S, 33E

14. Distance in miles and direction from nearest town or post office*
Approximately 31 miles NW of Jal, NM

12. County or Parish: Lea

13. State: NM

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line if any)	16. No of acres in lease	17. Spacing Unit dedicated to this well
330'	Private=0.00 acres NM0106040A=240.00 acres NM0160973=1238.72 acres	160.00
18. Distance from proposed* location to nearest well, drilling, completed, applied for, on this lease, ft.	**19. Proposed Depth**	**20. BLM/BIA Bond No. on File**
40'	Pilot Hole TD: N/A 14,569 MD 9,875 TVD	NM2575; NMB000835
21. Elevations (Show whether DF, KDB, RT, GL, etc.)	**22. Approximate date work will start***	**23. Estimated duration**
3373 GR	5/1/14	35 days

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:

1. Well plat certified by a registered surveyor
2. A Drilling Plan
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator Certification
6. Such other site specific information and/or plans as may be required by the authorized officer.

25. Signature	Name *(Printed/Typed)*	Date
	Terri Stathem	3/21/14

Title: Regulatory Compliance

Approved By *(Signature)* Steve Caffey	Name (Printed/Typed)	Date DEC 2 2014
Title FIELD MANAGER	Office CARLSBAD FIELD OFFICE	

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.
Conditions of approval, if any, are attached.

APPROVAL FOR TWO YEARS

Title 18 U.S.S. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious, or fraudulent statements or representations as to any matter within its jurisdiction.

(Continued on page 2)

(Instructions on page 2)

Carlsbad Controlled Water Basin

12/9/14

Approval Subject to General & Special Stipulations Attached

SEE ATTACHED FOR CONDITIONS OF APPROVAL

DEC 10 2014

Application to Drill
Red Hills Unit 25H
Cimarex Energy Co.
UL: B, Sec. 5, 26S, 33E
Lea Co., NM

In response to questions asked under Section II B of Bulletin NTL-6, the following information is provided for your consideration:

1. Location: SHL 330 FNL & 1330 FEL
BHL 330 FSL & 2200 FEL

2. Elevation Above Sea Level: 3,373' GR

3. Geologic Name of Surface Formation: Quaternary Alluvium Deposits

4. Drilling Tools and Associated Equipment: Conventional rotary drilling rig using fluid as a circulating medium for solids removal

5. Proposed Drilling Depth: 14,569 MD 9,875 TVD Pilot Hole TD: N/A

6. Estimated Tops of Geological Markers:

Formation	Est Top	Bearing
Rustler	995	N/A
Salt	1140	N/A
Castille	3380	N/A
Lamar	4900	N/A
Bell Canyon	4945	N/A
Cherry Canyon	6190	N/A
Brushy Canyon	7485	N/A
Bone Spring	9045	Hydrocarbons
U. Avalon (Leonard)	9080	Hydrocarbons
L. Avalon	9680	Hydrocarbons

7. Possible Mineral Bearing Formation: Shown above

7A. OSE Ground Water Estimated Depth: 185'

8. Casing Program:

Name	Casing Depth From (ft)	Casing Setting Depth (ft) MD	Casing Setting Depth (ft)TVD	Open Hole Size (inches)	Casing Size (inches)	Casing Weight (lb/ft)	Casing Grade	Thread	Conditon	BHP (psig)	Anticipated Mud Weight (ppg)	Collapse SF at Full Evacuation(1.125)	Collapse SF at 1/3 Evacuation(1.125)	Burst SF (1.125)	Cumulative Air Weight	Cumulative Bouyed Weight (lbs)	Bouyant Tension SF (1.8)
Surface	0	~~1045~~ 875	1045	17 1/2	13-3/8"	48.00	H-40	ST&C	New	478	8.8	1.55		3.62	50,160	43,421	7.42
Intermediate	0	~~4920~~ 4850	~~4920~~	12 1/4	9-5/8"	~~36.00~~ 40	J-55	LT&C	New	2583	10.1		1.17	1.36	177,120	149,808	3.02
Production	0	9241	9241	8 3/4	5-1/2"	17.00	L-80	LT&C	New	4420	9.2	1.42		1.75	167,875	144,295	2.34
Production	9241	14569	9875	8 3/4	5-1/2"	17.00	P-110	BT&C	New	4724	9.2	1.58		2.25	10,778	9,264	58.94

Note: Operator may drill a 8-1/2" OH from end of curve to TD of the well. This is to reduce the need to ream the conventionally drilled curve to run a RSS assembly into the lateral.

Application to Drill
Red Hills Unit 25H
Cimarex Energy Co.
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Lea Co., NM

8A. Casing Design and Casing Loading Assumptions:

Surface	Tension	A 1.8 design factor with effects of buoyancy: 8.80 ppg.
	Collapse	A 1.125 design factor with full internal evacuation and a collapse force equal to a 8.80 ppg mud gradient.
	Burst	A 1.125 design with a surface pressure equal to the fracture gradient at setting depth less gas gradient to surface.
Intermediate	Tension	A 1.8 design factor with effects of buoyancy: 10.10 ppg.
	Collapse	A 1.125 design factor evacuated 1/3 TVD of next casing string with a collapse force equal to a 10.10 ppg mud gradient. During the running of the casing, the operator will stop and fill the casing as need to ensure it does not collapse.
	Burst	A 1.125 design with a surface pressure equal to the fracture gradient at setting depth less gas gradient to surface.
Production and\or Production Completion System	Tension	A 1.8 design factor with effects of buoyancy: 9.20 ppg.
	Collapse	A 1.125 design factor with full internal evacuation of next casing string with a collapse force equal to a 9.20 ppg mud gradient.
	Burst	A 1.125 design with a surface pressure equal to the fracture gradient at setting depth less gas gradient to surface.

9. Cementing Program:

Casing Type	Type	Sacks	Yield	Weight	Cubic Feet	Cement Blend
Surface	Lead	498	1.75	13.50	871	Class C + Bentonite + Calcium Chloride + LCM, 8.829 gps water
	Tail	136	1.34	14.80	181	Class C + LCM, 6.320 gps water
	TOC: 0		**45% Excess**			**Centralizers per Onshore Order 2.III.B.1f**
Intermediate	Lead	897	1.88	12.90	1686	35:65 (Poz:C) + Salt + Bentonite + LCM + Retarder, 9.650 gps water
	Tail	288	1.34	14.80	385	Class C + Retarder + LCM, 6.320 gps water
	TOC: 0		**44% Excess**			
Production	Lead	540	2.33	11.90	1258	35:65(Poz:H) + Salt + Bentonite + Retarder + Dispersant + Antisettling Agent + LCM, 13.400 gps water
	Tail	1066	1.52	14.50	1620	Class H + Gel + Fly Ash + Silica Flour + Fluid Loss + Retarder + Anti Settling Agent + Anti-Foam, 6.690 gps water
	Tail	1209	1.34	14.80	1620	Class C + LCM, 6.320 gps water
	TOC: 4720		**16% Excess**			**No centralizers planned in the lateral section. 1 every jt from EOC to KOP. 1 every 4th joint from KOP to 500' inside previous casing.**

Cement volumes will be adjusted depending on hole size

9a. Proposed Drilling Plan:

Pilot Hole TD: No Pilot KOP: 9,241' EOC: 10,424'

Set Surface and Intermediate casing strings. Drill production hole to KOP. Continue drillling lateral through the curve to TD. Run prod casing & cement.

Application to Drill
Red Hills Unit 25H
Cimarex Energy Co.
UL: B, Sec. 5, 26S, 33E
Lea Co., NM

10. Pressure Control Equipment:
Exhibit "E-1". A BOP consisting of two rams with blind rams and pipe rams, and one annular preventer. Below the surface casing, a 2M system will be used. Below the intermediate casing, a 3M system will be used. See attachments for BOP and choke manifold diagrams. An accumulator that meets the requirements in Onshore Order #2 for the pressure rating of the BOP stack. A Rotating head may be installed as needed. A kelly cock will be installed and maintained in operable condition and a drill string safety valve in the open position will be available on the rig floor.

BOP and associated equipment will be installed, used, maintained, and tested in a manner necessary to assure well control and shall be in place and operational prior to drilling the surface casing shoe. The Annular Preventer shall be functioned at least weekly. The pipe and blind rams will be operated each trip. No abnormal pressure or temperature is expected while drilling.

BOPS will be tested by an independent service company. The ram preventers, choke manifold, and safety valves will be tested as follows: On the surface casing, pressure tests will be made to 250 psi low and 2000 psi high. On the intermediate casing, pressure tests will be made to 250 psi low and 3000 psi high.

The Annular Preventer will be tested to 250 psi low and 1000 psi high on the surface casing, and 250 low and 1500 high on the intermediate casing.

Cimarex Energy Co. of Colorado requests a variance to drill this well using a co-flex line between the BOP and choke manifold. Certification for proposed co-flex hose is attached (please see Exhibit F, F-1, F-2, F-3). The hose is not required by the manufacturer to be anchored. In the event the specific hose is not available, one of equal or higher rating will be used.

11. Proposed Mud Circulating System:

Depth 975	Mud Weight	Visc	Fluid Loss	Type Mud
0' to 1045'	8.30 - 8.80	28	NC	FW Spud Mud
1045' to 4920' 4850	9.60 - 10.10	30-32	NC	Brine Water
4920' to 14569'	8.70 - 9.20	30-32	NC	FW/Cut Brine

Sufficient mud materials will be kept on location at all times in order to combat lost circulation or unexpected kicks. In order to run DSTs, open hole logs, and casing, the viscosity and water loss may have to be adjusted in order to meet these needs.

The Mud Monitoring System is an electronic Pason System satisfying requirements of Onshore Order 1.

12. Testing, Logging and Coring Program:

A. Mud logging program: 2 man unit from 4920 to TD
B. Electric logging program: CNL / LDT / CAL / GR, DLL /GR -- Inter. Csg to TD
CNL /GR -- Surf to Inter. Csg
C. No DSTs or cores are planned at this time
D.CBL w/ CCL from as far as gravity will let it fall to TOC

13. Potential Hazards:
No abnormal pressures or temperatures are expected. In accordance with Onshore Order 6, Cimarex does not anticipate that there will be enough H_2S from the surface to the Bone Spring formations to meet the BLM's minimum requirements for the submission of an "H_2S Drilling Operation Plan" or "Public Protection Plan" for the drilling and completion of this well. Since we have an H_2S Safety package on all wells, attached is an "H_2S Drilling Operations Plan." Adequate flare lines will be installed off the mud / gas separator where gas may be flared safely. All personnel will be familiar with all aspects of safe operation of equipment being used.

Estimated BHP: 4444 psi Estimated BHT: 159°

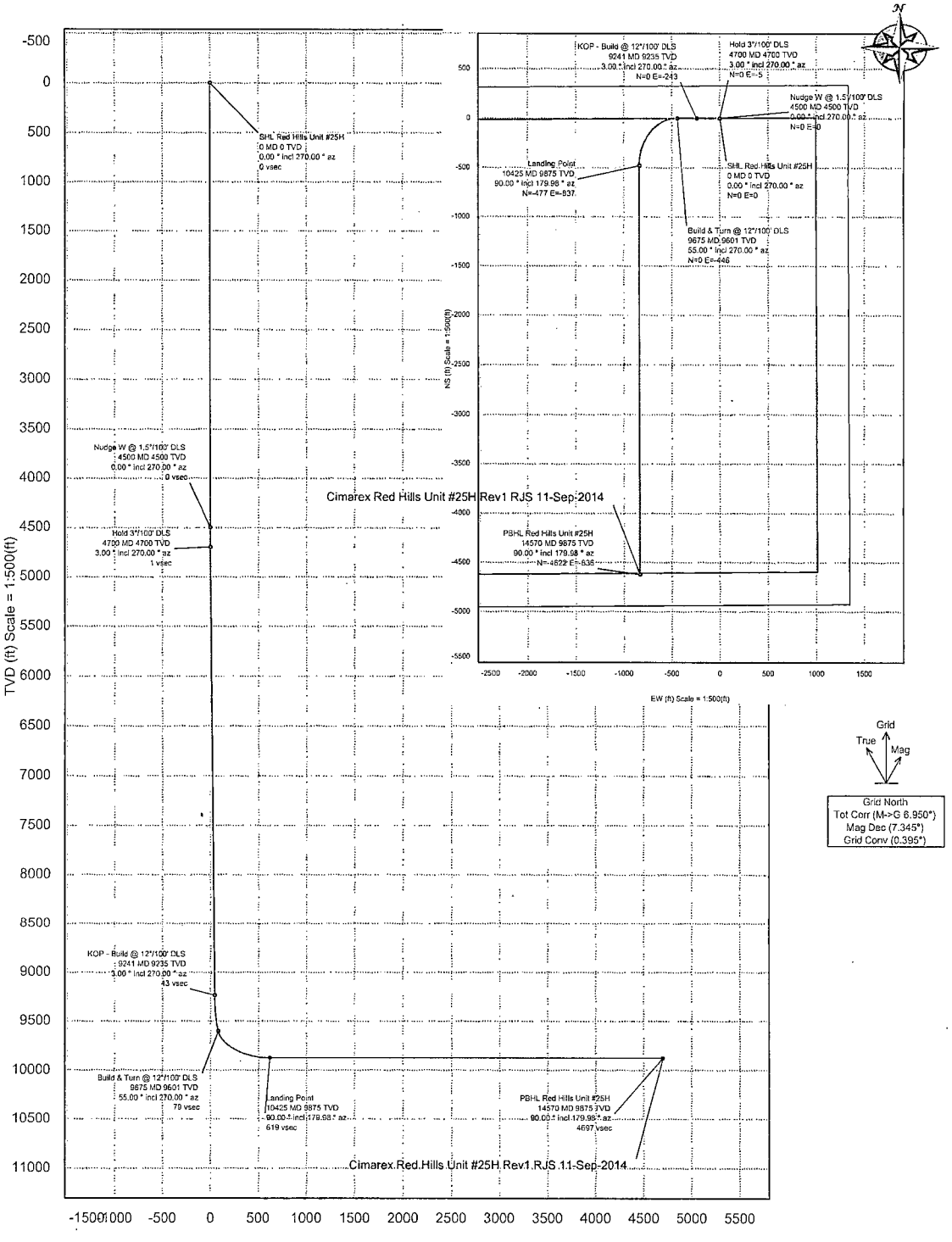
14. Construction and Drilling:
Road and location construction will begin after BLM approval of APD. Anticipated spud date as soon as approved.
Drilling expected to take: 35 days.
If production casing is run an additional 30 days will be required to complete and construct surface facilities.

15. Other Facets of Operations:
If production casing is run an additional 30 days will be required to complete and construct surface facilities.
L. Avalon pay will be perforated and stimulated.
The proposed well will be tested and potentialed as **Oil**

Cimarex

Borehole:	Well:	Field:	Structure:
Original Borehole	Red Hills Unit #25H	NM Lea County	TBD

Gravity & Magnetic Parameters				Surface Location	NAD83 New Mexico State Plane, Eastern Zone, US Feet				Miscellaneous			
Model:	BGGM 2014	Dip: 59.96°	Date: 11-Sep-2014	Lat:	N 32 4 44.01	Northing:	393230.7flUS	Grid Conv: 0.3948°	Slot:	Red Hills Unit #25H	TVD Ref:	Ground Level(3373ft above MSL)
MagDec:	7.345°	FS: 48163.736nT	Gravity FS: 998.433mgn (9.80665 Based)	Lon:	W 103 35 24.27	Easting:	771544.2flUS	Scale Fact: 0.99996979	Plan:	Rev1 RJS 11-Sep-2014		



Vertical Section (ft) Azim = 190.25° Scale = 1:500(ft) Origin = 0N/-S, 0E/-W

Critical Points								
Critical Point	MD	INCL	AZIM	TVD	VSEC	N(+)/S(-)	E(+)/W(-)	DLS
SHL Red Hills Unit #25H	0.00	0.00	270.00	0.00	0.00	0.00	0.00	
Nudge W @ 1.5°/100' DLS	4500.00	0.00	270.00	4500.00	0.00	0.00	0.00	0.00
Hold 3°/100' DLS	4700.00	3.00	270.00	4699.91	0.93	0.00	-5.23	1.50
KOP - Build @ 12°/100' DLS	9241.32	3.00	270.00	9235.00	43.21	0.00	-242.91	0.00
Build & Turn @ 12°/100' DLS	9674.65	55.00	270.00	9601.13	79.31	0.00	-445.86	12.00
Landing Point	10424.60	90.00	179.98	9875.00	618.71	-477.48	-836.82	12.00
PBHL Red Hills Unit #25H	14569.56	90.00	179.98	9675.00	4697.35	-4622.45	-835.53	0.00

Cimarex Red Hills Unit #25H Rev1 RJS 11-Sep-2014 Proposal Report 100' Interpolated

(Non-Def Plan)

Report Date:	September 11, 2014 - 11:16 AM	**Survey / DLS Computation:**	Minimum Curvature / Lubinski
Client:	Cimarex	**Vertical Section Azimuth:**	190.246 ° (Grid North)
Field:	NM Lea County (NAD 83)	**Vertical Section Origin:**	0.000 ft, 0.000 ft
Structure / Slot:	TBD / Red Hills Unit #25H	**TVD Reference Datum:**	Ground Level
Well:	Cimarex Red Hills Unit #25H	**TVD Reference Elevation:**	3373.000 ft above MSL
Borehole:	Original Borehole	**Seabed / Ground Elevation:**	3373.000 ft above MSL
UWI / API#:	Unknown / Unknown	**Magnetic Declination:**	7.345 °
Survey Name:	Cimarex Red Hills Unit #25H Rev1 RJS 11-Sep-2014	**Total Gravity Field Strength:**	998.4330mgn (9.80665 Based)
Survey Date:	September 11, 2014	**Gravity Model:**	GARM
Tort / AHD / DDI / ERD Ratio:	145.021 ° / 5274.633 ft / 6.053 / 0.534	**Total Magnetic Field Strength:**	48163.736 nT
Coordinate Reference System:	NAD83 New Mexico State Plane, Eastern Zone, US Feet	**Magnetic Dip Angle:**	59.960 °
Location Lat / Long:	N 32° 4' 44.00701", W 103° 35' 24.26830"	**Declination Date:**	September 11, 2014
Location Grid N/E Y/X:	N 393230.700 ftUS, E 771544.200 ftUS	**Magnetic Declination Model:**	BGGM 2014
CRS Grid Convergence Angle:	0.3948 °	**North Reference:**	Grid North
Grid Scale Factor:	0.99996979	**Grid Convergence Used:**	0.3948 °
Version / Patch:	2.7.1043.0	**Total Corr Mag North->Grid North:**	6.9500 °
		Local Coord Referenced To:	Structure Reference Point

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	TVDSS (ft)	VSEC (ft)	DLS (°/100ft)	NS (ft)	EW (ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
SHL Red Hills Unit #25H	0.00	0.00	270.00	0.00	-3373.00	0.00	N/A	0.00	0.00	393230.70	771544.20	N 32 4 44.01	W 103 35 24.27
	100.00	0.00	270.00	100.00	-3273.00	0.00	0.00	0.00	0.00	393230.70	771544.20	N 32 4 44.01	W 103 35 24.27
	200.00	0.00	270.00	200.00	-3173.00	0.00	0.00	0.00	0.00	393230.70	771544.20	N 32 4 44.01	W 103 35 24.27
	300.00	0.00	270.00	300.00	-3073.00	0.00	0.00	0.00	0.00	393230.70	771544.20	N 32 4 44.01	W 103 35 24.27
	400.00	0.00	270.00	400.00	-2973.00	0.00	0.00	0.00	0.00	393230.70	771544.20	N 32 4 44.01	W 103 35 24.27
	500.00	0.00	270.00	500.00	-2873.00	0.00	0.00	0.00	0.00	393230.70	771544.20	N 32 4 44.01	W 103 35 24.27
	600.00	0.00	270.00	600.00	-2773.00	0.00	0.00	0.00	0.00	393230.70	771544.20	N 32 4 44.01	W 103 35 24.27
	700.00	0.00	270.00	700.00	-2673.00	0.00	0.00	0.00	0.00	393230.70	771544.20	N 32 4 44.01	W 103 35 24.27
	800.00	0.00	270.00	800.00	-2573.00	0.00	0.00	0.00	0.00	393230.70	771544.20	N 32 4 44.01	W 103 35 24.27
	900.00	0.00	270.00	900.00	-2473.00	0.00	0.00	0.00	0.00	393230.70	771544.20	N 32 4 44.01	W 103 35 24.27
	1000.00	0.00	270.00	1000.00	-2373.00	0.00	0.00	0.00	0.00	393230.70	771544.20	N 32 4 44.01	W 103 35 24.27
	1100.00	0.00	270.00	1100.00	-2273.00	0.00	0.00	0.00	0.00	393230.70	771544.20	N 32 4 44.01	W 103 35 24.27
	1200.00	0.00	270.00	1200.00	-2173.00	0.00	0.00	0.00	0.00	393230.70	771544.20	N 32 4 44.01	W 103 35 24.27
	1300.00	0.00	270.00	1300.00	-2073.00	0.00	0.00	0.00	0.00	393230.70	771544.20	N 32 4 44.01	W 103 35 24.27
	1400.00	0.00	270.00	1400.00	-1973.00	0.00	0.00	0.00	0.00	393230.70	771544.20	N 32 4 44.01	W 103 35 24.27
	1500.00	0.00	270.00	1500.00	-1873.00	0.00	0.00	0.00	0.00	393230.70	771544.20	N 32 4 44.01	W 103 35 24.27
	1600.00	0.00	270.00	1600.00	-1773.00	0.00	0.00	0.00	0.00	393230.70	771544.20	N 32 4 44.01	W 103 35 24.27
	1700.00	0.00	270.00	1700.00	-1673.00	0.00	0.00	0.00	0.00	393230.70	771544.20	N 32 4 44.01	W 103 35 24.27
	1800.00	0.00	270.00	1800.00	-1573.00	0.00	0.00	0.00	0.00	393230.70	771544.20	N 32 4 44.01	W 103 35 24.27
	1900.00	0.00	270.00	1900.00	-1473.00	0.00	0.00	0.00	0.00	393230.70	771544.20	N 32 4 44.01	W 103 35 24.27
	2000.00	0.00	270.00	2000.00	-1373.00	0.00	0.00	0.00	0.00	393230.70	771544.20	N 32 4 44.01	W 103 35 24.27
	2100.00	0.00	270.00	2100.00	-1273.00	0.00	0.00	0.00	0.00	393230.70	771544.20	N 32 4 44.01	W 103 35 24.27
	2200.00	0.00	270.00	2200.00	-1173.00	0.00	0.00	0.00	0.00	393230.70	771544.20	N 32 4 44.01	W 103 35 24.27
	2300.00	0.00	270.00	2300.00	-1073.00	0.00	0.00	0.00	0.00	393230.70	771544.20	N 32 4 44.01	W 103 35 24.27
	2400.00	0.00	270.00	2400.00	-973.00	0.00	0.00	0.00	0.00	393230.70	771544.20	N 32 4 44.01	W 103 35 24.27
	2500.00	0.00	270.00	2500.00	-873.00	0.00	0.00	0.00	0.00	393230.70	771544.20	N 32 4 44.01	W 103 35 24.27
	2600.00	0.00	270.00	2600.00	-773.00	0.00	0.00	0.00	0.00	393230.70	771544.20	N 32 4 44.01	W 103 35 24.27

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	TVDSS (ft)	VSEC (ft)	DLS (°/100ft)	NS (ft)	EW (ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
	2700.00	0.00	270.00	2700.00	-673.00	0.00	0.00	0.00	0.00	393230.70	771544.20	N 32 4 44.01	W 103 35 24.27
	2800.00	0.00	270.00	2800.00	-573.00	0.00	0.00	0.00	0.00	393230.70	771544.20	N 32 4 44.01	W 103 35 24.27
	2900.00	0.00	270.00	2900.00	-473.00	0.00	0.00	0.00	0.00	393230.70	771544.20	N 32 4 44.01	W 103 35 24.27
	3000.00	0.00	270.00	3000.00	-373.00	0.00	0.00	0.00	0.00	393230.70	771544.20	N 32 4 44.01	W 103 35 24.27
	3100.00	0.00	270.00	3100.00	-273.00	0.00	0.00	0.00	0.00	393230.70	771544.20	N 32 4 44.01	W 103 35 24.27
	3200.00	0.00	270.00	3200.00	-173.00	0.00	0.00	0.00	0.00	393230.70	771544.20	N 32 4 44.01	W 103 35 24.27
	3300.00	0.00	270.00	3300.00	-73.00	0.00	0.00	0.00	0.00	393230.70	771544.20	N 32 4 44.01	W 103 35 24.27
	3400.00	0.00	270.00	3400.00	27.00	0.00	0.00	0.00	0.00	393230.70	771544.20	N 32 4 44.01	W 103 35 24.27
	3500.00	0.00	270.00	3500.00	127.00	0.00	0.00	0.00	0.00	393230.70	771544.20	N 32 4 44.01	W 103 35 24.27
	3600.00	0.00	270.00	3600.00	227.00	0.00	0.00	0.00	0.00	393230.70	771544.20	N 32 4 44.01	W 103 35 24.27
	3700.00	0.00	270.00	3700.00	327.00	0.00	0.00	0.00	0.00	393230.70	771544.20	N 32 4 44.01	W 103 35 24.27
	3800.00	0.00	270.00	3800.00	427.00	0.00	0.00	0.00	0.00	393230.70	771544.20	N 32 4 44.01	W 103 35 24.27
	3900.00	0.00	270.00	3900.00	527.00	0.00	0.00	0.00	0.00	393230.70	771544.20	N 32 4 44.01	W 103 35 24.27
	4000.00	0.00	270.00	4000.00	627.00	0.00	0.00	0.00	0.00	393230.70	771544.20	N 32 4 44.01	W 103 35 24.27
	4100.00	0.00	270.00	4100.00	727.00	0.00	0.00	0.00	0.00	393230.70	771544.20	N 32 4 44.01	W 103 35 24.27
	4200.00	0.00	270.00	4200.00	827.00	0.00	0.00	0.00	0.00	393230.70	771544.20	N 32 4 44.01	W 103 35 24.27
	4300.00	0.00	270.00	4300.00	927.00	0.00	0.00	0.00	0.00	393230.70	771544.20	N 32 4 44.01	W 103 35 24.27
	4400.00	0.00	270.00	4400.00	1027.00	0.00	0.00	0.00	0.00	393230.70	771544.20	N 32 4 44.01	W 103 35 24.27
Nudge W @ 1.5°/100' DLS	4500.00	0.00	270.00	4500.00	1127.00	0.00	0.00	0.00	0.00	393230.70	771544.20	N 32 4 44.01	W 103 35 24.27
	4600.00	1.50	270.00	4599.99	1226.99	0.23	1.50	0.00	-1.31	393230.70	771542.89	N 32 4 44.01	W 103 35 24.28
Hold 3°/100' DLS	4700.00	3.00	270.00	4699.91	1326.91	0.93	1.50	0.00	-5.23	393230.70	771538.97	N 32 4 44.01	W 103 35 24.33
	4800.00	3.00	270.00	4799.77	1426.77	1.86	0.00	0.00	-10.47	393230.70	771533.73	N 32 4 44.01	W 103 35 24.39
	4900.00	3.00	270.00	4899.63	1526.63	2.79	0.00	0.00	-15.70	393230.70	771528.50	N 32 4 44.01	W 103 35 24.45
	5000.00	3.00	270.00	4999.50	1626.50	3.72	0.00	0.00	-20.94	393230.70	771523.27	N 32 4 44.01	W 103 35 24.51
	5100.00	3.00	270.00	5099.36	1726.36	4.65	0.00	0.00	-26.17	393230.70	771518.03	N 32 4 44.01	W 103 35 24.57
	5200.00	3.00	270.00	5199.22	1826.22	5.59	0.00	0.00	-31.40	393230.70	771512.80	N 32 4 44.01	W 103 35 24.63
	5300.00	3.00	270.00	5299.09	1926.09	6.52	0.00	0.00	-36.64	393230.70	771507.56	N 32 4 44.01	W 103 35 24.69
	5400.00	3.00	270.00	5398.95	2025.95	7.45	0.00	0.00	-41.87	393230.70	771502.33	N 32 4 44.01	W 103 35 24.75
	5500.00	3.00	270.00	5498.81	2125.81	8.38	0.00	0.00	-47.10	393230.70	771497.10	N 32 4 44.01	W 103 35 24.82
	5600.00	3.00	270.00	5598.68	2225.68	9.31	0.00	0.00	-52.34	393230.70	771491.86	N 32 4 44.01	W 103 35 24.88
	5700.00	3.00	270.00	5698.54	2325.54	10.24	0.00	0.00	-57.57	393230.70	771486.63	N 32 4 44.01	W 103 35 24.94
	5800.00	3.00	270.00	5798.40	2425.40	11.17	0.00	0.00	-62.80	393230.70	771481.40	N 32 4 44.01	W 103 35 25.00
	5900.00	3.00	270.00	5898.26	2525.26	12.10	0.00	0.00	-68.04	393230.70	771476.16	N 32 4 44.01	W 103 35 25.06
	6000.00	3.00	270.00	5998.13	2625.13	13.03	0.00	0.00	-73.27	393230.70	771470.93	N 32 4 44.01	W 103 35 25.12
	6100.00	3.00	270.00	6097.99	2724.99	13.96	0.00	0.00	-78.51	393230.70	771465.70	N 32 4 44.01	W 103 35 25.18
	6200.00	3.00	270.00	6197.85	2824.85	14.89	0.00	0.00	-83.74	393230.70	771460.46	N 32 4 44.01	W 103 35 25.24
	6300.00	3.00	270.00	6297.72	2924.72	15.83	0.00	0.00	-88.97	393230.70	771455.23	N 32 4 44.01	W 103 35 25.30
	6400.00	3.00	270.00	6397.58	3024.58	16.76	0.00	0.00	-94.21	393230.70	771450.00	N 32 4 44.01	W 103 35 25.36
	6500.00	3.00	270.00	6497.44	3124.44	17.69	0.00	0.00	-99.44	393230.70	771444.76	N 32 4 44.01	W 103 35 25.42
	6600.00	3.00	270.00	6597.30	3224.30	18.62	0.00	0.00	-104.67	393230.70	771439.53	N 32 4 44.01	W 103 35 25.48
	6700.00	3.00	270.00	6697.17	3324.17	19.55	0.00	0.00	-109.91	393230.70	771434.30	N 32 4 44.01	W 103 35 25.55
	6800.00	3.00	270.00	6797.03	3424.03	20.48	0.00	0.00	-115.14	393230.70	771429.06	N 32 4 44.01	W 103 35 25.61
	6900.00	3.00	270.00	6896.89	3523.89	21.41	0.00	0.00	-120.37	393230.70	771423.83	N 32 4 44.02	W 103 35 25.67
	7000.00	3.00	270.00	6996.76	3623.76	22.34	0.00	0.00	-125.61	393230.70	771418.60	N 32 4 44.02	W 103 35 25.73
	7100.00	3.00	270.00	7096.62	3723.62	23.27	0.00	0.00	-130.84	393230.70	771413.36	N 32 4 44.02	W 103 35 25.79
	7200.00	3.00	270.00	7196.48	3823.48	24.20	0.00	0.00	-136.07	393230.70	771408.13	N 32 4 44.02	W 103 35 25.85
	7300.00	3.00	270.00	7296.35	3923.35	25.13	0.00	0.00	-141.31	393230.70	771402.90	N 32 4 44.02	W 103 35 25.91
	7400.00	3.00	270.00	7396.21	4023.21	26.07	0.00	0.00	-146.54	393230.70	771397.66	N 32 4 44.02	W 103 35 25.97
	7500.00	3.00	270.00	7496.07	4123.07	27.00	0.00	0.00	-151.78	393230.70	771392.43	N 32 4 44.02	W 103 35 26.03
	7600.00	3.00	270.00	7595.93	4222.93	27.93	0.00	0.00	-157.01	393230.70	771387.20	N 32 4 44.02	W 103 35 26.09
	7700.00	3.00	270.00	7695.80	4322.80	28.86	0.00	0.00	-162.24	393230.70	771381.96	N 32 4 44.02	W 103 35 26.15

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	TVDSS (ft)	VSEC (ft)	DLS (°/100ft)	NS (ft)	EW (ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
	7800.00	3.00	270.00	7795.66	4422.66	29.79	0.00	0.00	-167.48	393230.70	771376.73	N 32 4 44.02	W 103 35 26.21
	7900.00	3.00	270.00	7895.52	4522.52	30.72	0.00	0.00	-172.71	393230.70	771371.50	N 32 4 44.02	W 103 35 26.28
	8000.00	3.00	270.00	7995.39	4622.39	31.65	0.00	0.00	-177.94	393230.70	771366.26	N 32 4 44.02	W 103 35 26.34
	8100.00	3.00	270.00	8095.25	4722.25	32.58	0.00	0.00	-183.18	393230.70	771361.03	N 32 4 44.02	W 103 35 26.40
	8200.00	3.00	270.00	8195.11	4822.11	33.51	0.00	0.00	-188.41	393230.70	771355.80	N 32 4 44.02	W 103 35 26.46
	8300.00	3.00	270.00	8294.97	4921.97	34.44	0.00	0.00	-193.64	393230.70	771350.56	N 32 4 44.02	W 103 35 26.52
	8400.00	3.00	270.00	8394.84	5021.84	35.37	0.00	0.00	-198.88	393230.70	771345.33	N 32 4 44.02	W 103 35 26.58
	8500.00	3.00	270.00	8494.70	5121.70	36.31	0.00	0.00	-204.11	393230.70	771340.10	N 32 4 44.02	W 103 35 26.64
	8600.00	3.00	270.00	8594.56	5221.56	37.24	0.00	0.00	-209.35	393230.70	771334.86	N 32 4 44.02	W 103 35 26.70
	8700.00	3.00	270.00	8694.43	5321.43	38.17	0.00	0.00	-214.58	393230.70	771329.63	N 32 4 44.02	W 103 35 26.76
	8800.00	3.00	270.00	8794.29	5421.29	39.10	0.00	0.00	-219.81	393230.70	771324.39	N 32 4 44.02	W 103 35 26.82
	8900.00	3.00	270.00	8894.15	5521.15	40.03	0.00	0.00	-225.05	393230.70	771319.16	N 32 4 44.02	W 103 35 26.88
	9000.00	3.00	270.00	8994.02	5621.02	40.96	0.00	0.00	-230.28	393230.70	771313.93	N 32 4 44.02	W 103 35 26.94
	9100.00	3.00	270.00	9093.88	5720.88	41.89	0.00	0.00	-235.51	393230.70	771308.69	N 32 4 44.02	W 103 35 27.01
	9200.00	3.00	270.00	9193.74	5820.74	42.82	0.00	0.00	-240.75	393230.70	771303.46	N 32 4 44.02	W 103 35 27.07
KOP - Build @ 12°/100' DLS	9241.32	3.00	270.00	9235.00	5862.00	43.21	0.00	0.00	-242.91	393230.70	771301.30	N 32 4 44.02	W 103 35 27.09
	9300.00	10.04	270.00	9293.27	5920.27	44.39	12.00	0.00	-249.57	393230.70	771294.64	N 32 4 44.02	W 103 35 27.17
	9400.00	22.04	270.00	9389.20	6016.20	49.30	12.00	0.00	-277.15	393230.70	771267.06	N 32 4 44.03	W 103 35 27.49
	9500.00	34.04	270.00	9477.30	6104.30	57.64	12.00	0.00	-324.08	393230.70	771220.13	N 32 4 44.03	W 103 35 28.03
	9600.00	46.04	270.00	9553.72	6180.72	69.07	12.00	0.00	-388.30	393230.70	771155.92	N 32 4 44.03	W 103 35 28.78
Build & Turn @ 12°/100' DLS	9674.65	55.00	270.00	9601.13	6228.13	79.31	12.00	0.00	-445.86	393230.70	771098.36	N 32 4 44.04	W 103 35 29.45
	9700.00	55.06	266.29	9615.66	6242.66	83.66	12.00	-0.67	-466.61	393230.03	771077.60	N 32 4 44.03	W 103 35 29.69
	9800.00	56.36	251.83	9672.21	6299.21	113.46	12.00	-16.36	-547.36	393214.34	770996.86	N 32 4 43.88	W 103 35 30.63
	9900.00	59.28	238.06	9725.64	6352.64	162.31	12.00	-52.21	-623.67	393178.49	770920.55	N 32 4 43.53	W 103 35 31.52
	10000.00	63.54	225.27	9773.64	6400.64	228.07	12.00	-106.65	-692.20	393124.05	770852.03	N 32 4 43.00	W 103 35 32.32
	10100.00	68.86	213.50	9814.10	6441.10	307.87	12.00	-177.30	-749.95	393053.41	770794.27	N 32 4 42.30	W 103 35 33.00
	10200.00	74.93	202.60	9845.25	6472.25	398.20	12.00	-261.07	-794.41	392969.64	770749.82	N 32 4 41.48	W 103 35 33.52
	10300.00	81.49	192.32	9865.73	6492.73	495.14	12.00	-354.29	-823.62	392876.42	770720.61	N 32 4 40.56	W 103 35 33.87
	10400.00	88.31	182.40	9874.64	6501.64	594.43	12.00	-452.90	-836.31	392777.82	770707.92	N 32 4 39.58	W 103 35 34.02
Landing Point	10424.60	90.00	179.98	9875.00	6502.00	618.71	12.00	-477.48	-836.82	392753.23	770707.41	N 32 4 39.34	W 103 35 34.03
	10500.00	90.00	179.98	9875.00	6502.00	692.91	0.00	-552.88	-836.79	392677.83	770707.43	N 32 4 38.59	W 103 35 34.04
	10600.00	90.00	179.98	9875.00	6502.00	791.31	0.00	-652.88	-836.76	392577.84	770707.47	N 32 4 37.60	W 103 35 34.05
	10700.00	90.00	179.98	9875.00	6502.00	889.71	0.00	-752.88	-836.72	392477.84	770707.50	N 32 4 36.61	W 103 35 34.05
	10800.00	90.00	179.98	9875.00	6502.00	988.11	0.00	-852.88	-836.69	392377.84	770707.54	N 32 4 35.62	W 103 35 34.06
	10900.00	90.00	179.98	9875.00	6502.00	1086.51	0.00	-952.88	-836.66	392277.85	770707.57	N 32 4 34.64	W 103 35 34.07
	11000.00	90.00	179.98	9875.00	6502.00	1184.91	0.00	-1052.88	-836.62	392177.85	770707.60	N 32 4 33.65	W 103 35 34.08
	11100.00	90.00	179.98	9875.00	6502.00	1283.31	0.00	-1152.88	-836.59	392077.85	770707.64	N 32 4 32.66	W 103 35 34.08
	11200.00	90.00	179.98	9875.00	6502.00	1381.71	0.00	-1252.88	-836.55	391977.86	770707.67	N 32 4 31.67	W 103 35 34.09
	11300.00	90.00	179.98	9875.00	6502.00	1480.10	0.00	-1352.88	-836.52	391877.86	770707.71	N 32 4 30.68	W 103 35 34.10
	11400.00	90.00	179.98	9875.00	6502.00	1578.50	0.00	-1452.88	-836.49	391777.86	770707.74	N 32 4 29.69	W 103 35 34.11
	11500.00	90.00	179.98	9875.00	6502.00	1676.90	0.00	-1552.88	-836.46	391677.87	770707.77	N 32 4 28.70	W 103 35 34.11
	11600.00	90.00	179.98	9875.00	6502.00	1775.30	0.00	-1652.88	-836.42	391577.87	770707.80	N 32 4 27.71	W 103 35 34.12
	11700.00	90.00	179.98	9875.00	6502.00	1873.70	0.00	-1752.88	-836.39	391477.87	770707.84	N 32 4 26.72	W 103 35 34.13
	11800.00	90.00	179.98	9875.00	6502.00	1972.10	0.00	-1852.88	-836.36	391377.88	770707.87	N 32 4 25.73	W 103 35 34.14
	11900.00	90.00	179.98	9875.00	6502.00	2070.50	0.00	-1952.88	-836.32	391277.88	770707.90	N 32 4 24.74	W 103 35 34.14
	12000.00	90.00	179.98	9875.00	6502.00	2168.90	0.00	-2052.88	-836.29	391177.88	770707.93	N 32 4 23.75	W 103 35 34.15
	12100.00	90.00	179.98	9875.00	6502.00	2267.30	0.00	-2152.88	-836.26	391077.88	770707.97	N 32 4 22.76	W 103 35 34.16
	12200.00	90.00	179.98	9875.00	6502.00	2365.70	0.00	-2252.88	-836.23	390977.89	770708.00	N 32 4 21.77	W 103 35 34.17
	12300.00	90.00	179.98	9875.00	6502.00	2464.10	0.00	-2352.88	-836.20	390877.89	770708.03	N 32 4 20.78	W 103 35 34.17
	12400.00	90.00	179.98	9875.00	6502.00	2562.50	0.00	-2452.88	-836.17	390777.89	770708.06	N 32 4 19.79	W 103 35 34.18
	12500.00	90.00	179.98	9875.00	6502.00	2660.90	0.00	-2552.88	-836.13	390677.90	770708.09	N 32 4 18.80	W 103 35 34.19

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	TVDSS (ft)	VSEC (ft)	DLS (°/100ft)	NS (ft)	EW (ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
	12600.00	90.00	179.98	9875.00	6502.00	2759.30	0.00	-2652.88	-836.10	390577.90	770708.12	N 32 4 17.81	W 103 35 34.20
	12700.00	90.00	179.98	9875.00	6502.00	2857.70	0.00	-2752.88	-836.07	390477.90	770708.15	N 32 4 16.82	W 103 35 34.20
	12800.00	90.00	179.98	9875.00	6502.00	2956.10	0.00	-2852.88	-836.04	390377.91	770708.19	N 32 4 15.83	W 103 35 34.21
	12900.00	90.00	179.98	9875.00	6502.00	3054.50	0.00	-2952.88	-836.01	390277.91	770708.22	N 32 4 14.84	W 103 35 34.22
	13000.00	90.00	179.98	9875.00	6502.00	3152.90	0.00	-3052.88	-835.98	390177.91	770708.25	N 32 4 13.86	W 103 35 34.23
	13100.00	90.00	179.98	9875.00	6502.00	3251.30	0.00	-3152.88	-835.95	390077.92	770708.28	N 32 4 12.87	W 103 35 34.24
	13200.00	90.00	179.98	9875.00	6502.00	3349.70	0.00	-3252.88	-835.92	389977.92	770708.31	N 32 4 11.88	W 103 35 34.24
	13300.00	90.00	179.98	9875.00	6502.00	3448.10	0.00	-3352.88	-835.89	389877.92	770708.34	N 32 4 10.89	W 103 35 34.25
	13400.00	90.00	179.98	9875.00	6502.00	3546.50	0.00	-3452.88	-835.86	389777.93	770708.37	N 32 4 9.90	W 103 35 34.26
	13500.00	90.00	179.98	9875.00	6502.00	3644.90	0.00	-3552.88	-835.83	389677.93	770708.40	N 32 4 8.91	W 103 35 34.27
	13600.00	90.00	179.98	9875.00	6502.00	3743.30	0.00	-3652.88	-835.80	389577.93	770708.42	N 32 4 7.92	W 103 35 34.27
	13700.00	90.00	179.98	9875.00	6502.00	3841.70	0.00	-3752.88	-835.77	389477.94	770708.45	N 32 4 6.93	W 103 35 34.28
	13800.00	90.00	179.98	9875.00	6502.00	3940.10	0.00	-3852.88	-835.74	389377.94	770708.48	N 32 4 5.94	W 103 35 34.29
	13900.00	90.00	179.98	9875.00	6502.00	4038.50	0.00	-3952.88	-835.72	389277.94	770708.51	N 32 4 4.95	W 103 35 34.30
	14000.00	90.00	179.98	9875.00	6502.00	4136.90	0.00	-4052.88	-835.69	389177.95	770708.54	N 32 4 3.96	W 103 35 34.30
	14100.00	90.00	179.98	9875.00	6502.00	4235.30	0.00	-4152.88	-835.66	389077.95	770708.57	N 32 4 2.97	W 103 35 34.31
	14200.00	90.00	179.98	9875.00	6502.00	4333.70	0.00	-4252.88	-835.63	388977.95	770708.60	N 32 4 1.98	W 103 35 34.32
	14300.00	90.00	179.98	9875.00	6502.00	4432.10	0.00	-4352.88	-835.60	388877.96	770708.63	N 32 4 0.99	W 103 35 34.33
	14400.00	90.00	179.98	9875.00	6502.00	4530.50	0.00	-4452.88	-835.57	388777.96	770708.65	N 32 4 0.00	W 103 35 34.33
	14500.00	90.00	179.98	9875.00	6502.00	4628.90	0.00	-4552.88	-835.55	388677.96	770708.68	N 32 3 59.01	W 103 35 34.34
PBHL Red Hills Unit #25H	14569.56	90.00	179.98	9875.00	6502.00	4697.35	0.00	-4622.45	-835.53	388608.40	770708.70	N 32 3 58.32	W 103 35 34.35

Survey Type: Non-Def Plan

Survey Error Model: ISCWSA Rev 0 *** 3-D 95.000% Confidence 2.7955 sigma

Survey Program:

Description	Part	MD From (ft)	MD To (ft)	EOU Freq (ft)	Hole Size (in)	Casing Diameter (in)	Survey Tool Type	Borehole / Survey
	1	0.000	9235.000	1/100.000	30.000	30.000	SLB_MWD-POOR	Original Borehole / Cimarex Red Hills Unit #25H Rev1 RJS 11-Sep-
	1	9235.000	14569.564	1/100.000	30.000	30.000	SLB_MWD-STD	Original Borehole / Cimarex Red Hills Unit #25H Rev1 RJS 11-Sep-

Drilling 12-1/4" hole
below 13 3/8" Casing

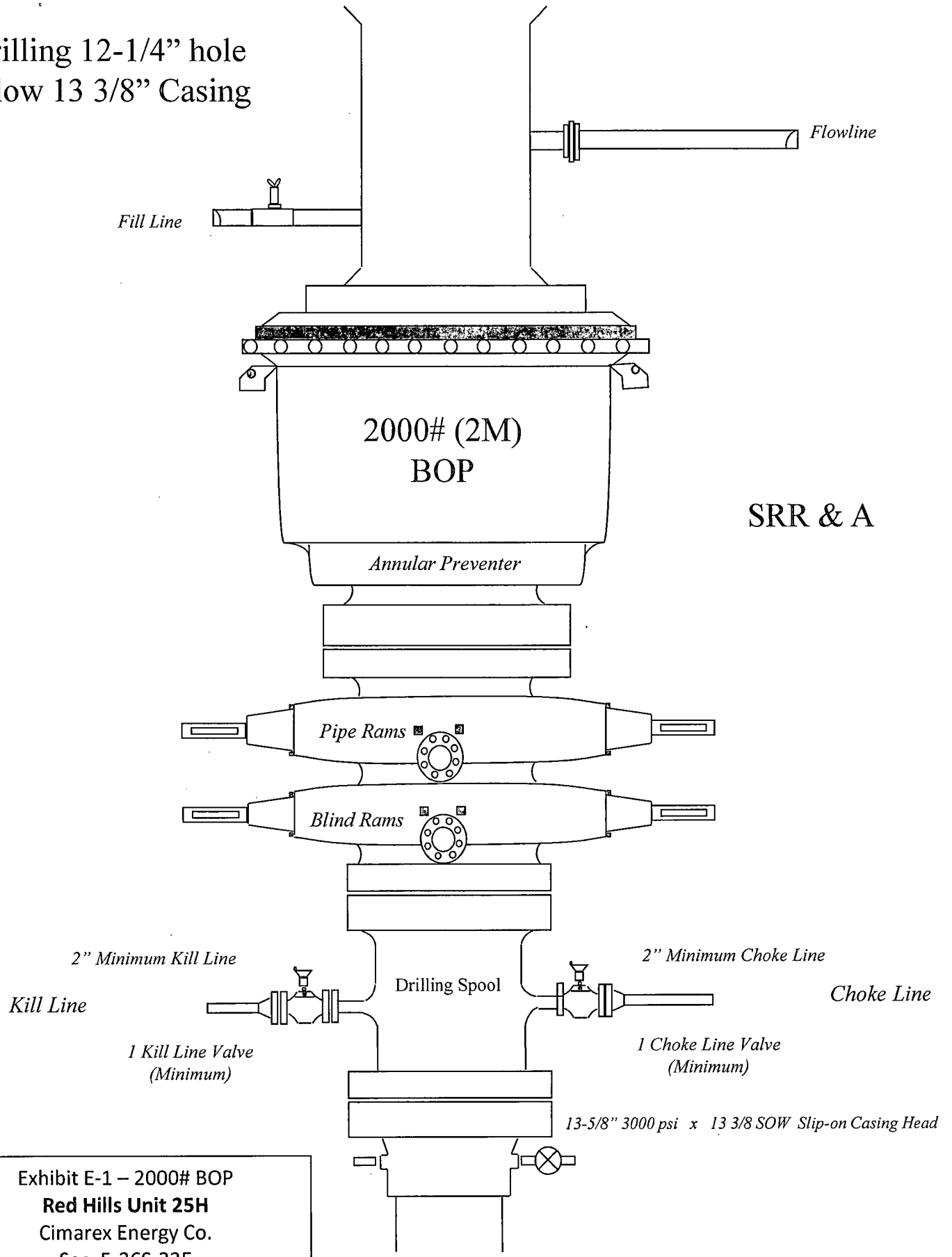
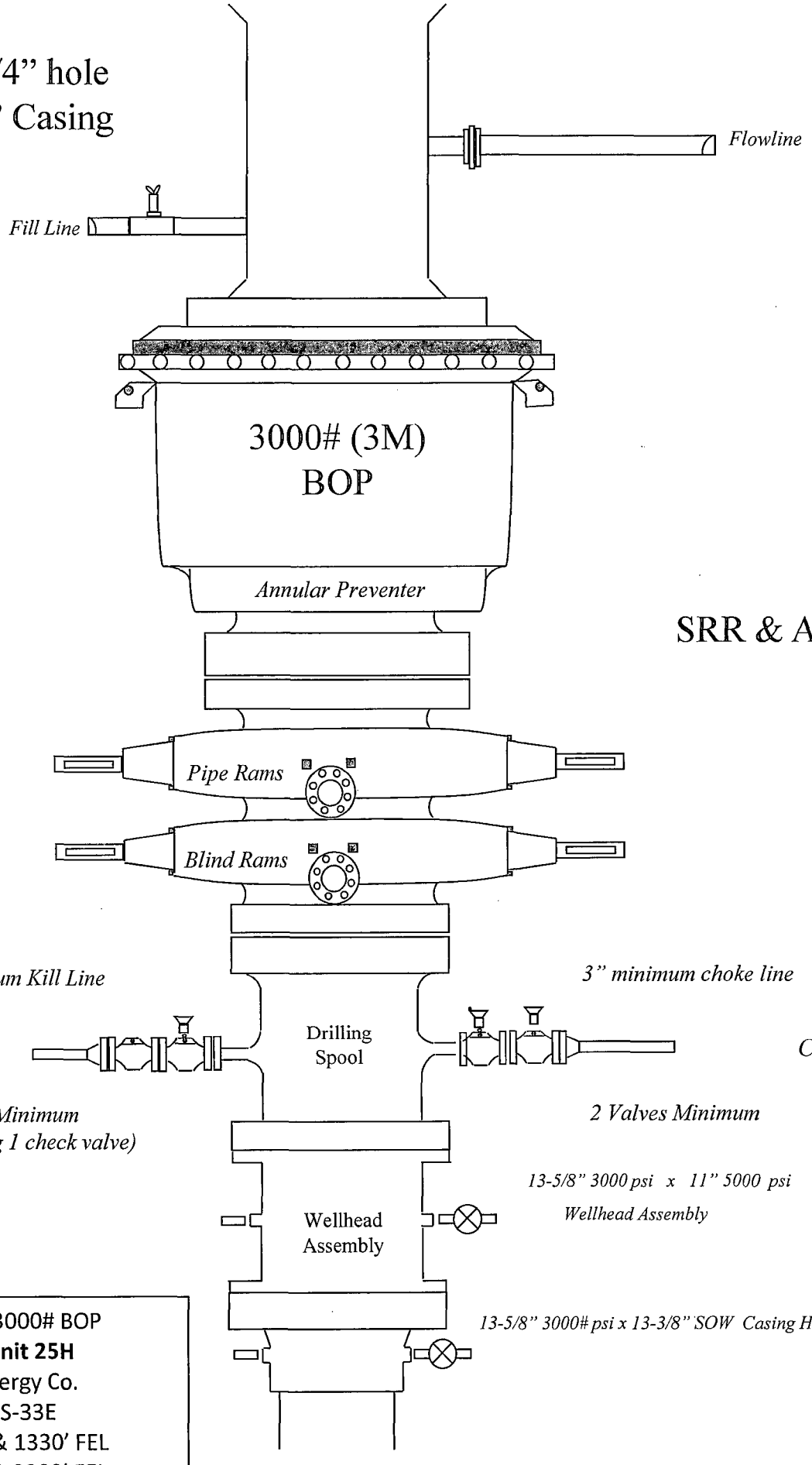


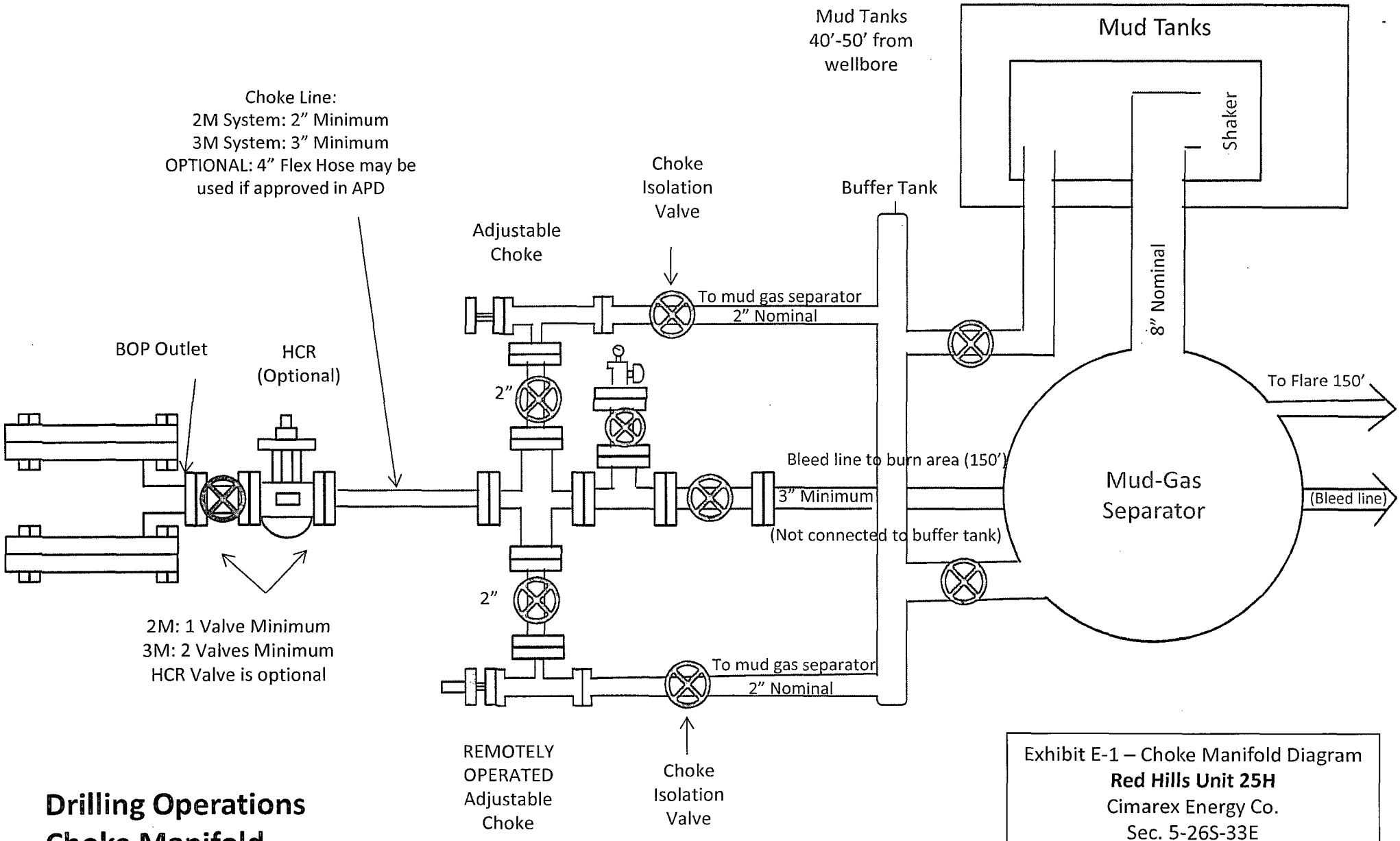
Exhibit E-1 – 2000# BOP
Red Hills Unit 25H
Cimarex Energy Co.
Sec. 5-26S-33E
SHL 330' FNL & 1330' FEL
BHL 330' FSL & 2200' FEL
Lea County, NM

Drilling 8-3/4" hole
below 9 5/8" Casing



SRR & A

Exhibit E-1 – 3000# BOP
Red Hills Unit 25H
Cimarex Energy Co.
Sec. 5-26S-33E
SHL 330' FNL & 1330' FEL
BHL 330' FSL & 2200' FEL
Lea County, NM



Drilling Operations
Choke Manifold
2M/3M Service

Exhibit E-1 – Choke Manifold Diagram
Red Hills Unit 25H
Cimarex Energy Co.
Sec. 5-26S-33E
SHL 330' FNL & 1330' FEL
BHL 330' FSL & 2200' FEL
Lea County, NM

Exhibit F – Co-Flex Hose

Red Hills Unit 25H

Cimarex Energy Co.

Sec. 5-26S-33E

SHL 330' FNL & 1330' FEL

BHL 330' FSL & 2200' FEL

Lea County, NM

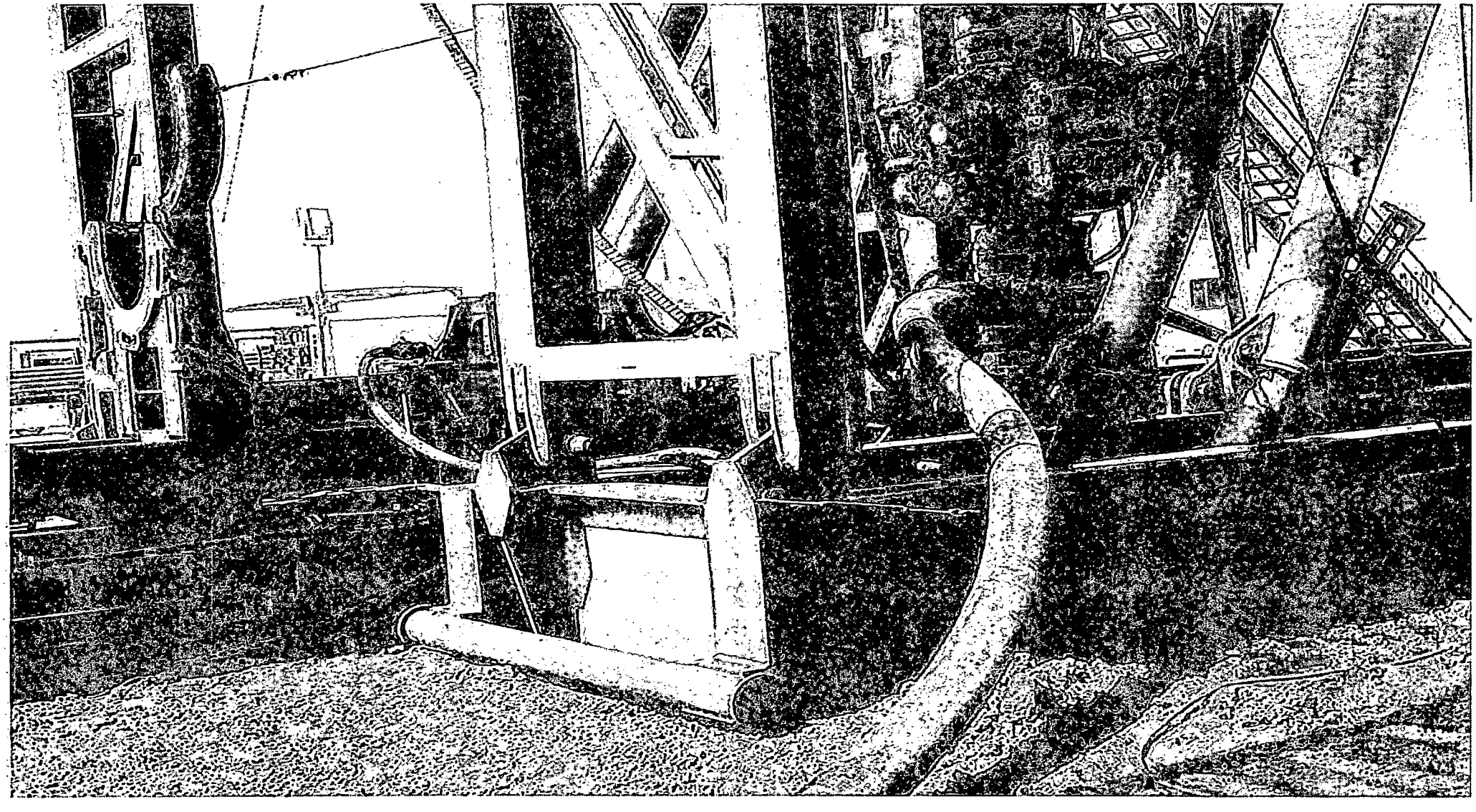


Exhibit F-1 – Co-Flex Hose Hydrostatic Test
Red Hills Unit 25H
Cimarex Energy Co.
Sec. 5-26S-33E
SHL 330' FNL & 1330' FEL
BHL 330' FSL & 2200' FEL
Lea County, NM

Midwest Hose & Specialty, Inc.

INTERNAL HYDROSTATIC TEST REPORT

Customer:	P.O. Number:
Oderco Inc	odyd-271

HOSE SPECIFICATIONS

Type: Stainless Steel Armor Choke & Kill Hose	Hose Length: 45'ft.
I.D. 4 *INCHES*	O.D. 9 *INCHES*

WORKING PRESSURE	TEST PRESSURE	BURST PRESSURE
10,000 *PSI*	15,000 *PSI*	0 *PSI*

COUPLINGS

Stem Part No.	Ferrule No.
OKC OKC	OKC OKC
Type of Coupling: Swage-It	

PROCEDURE

Hose assembly pressure tested with water at ambient temperature.

TIME HELD AT TEST PRESSURE	ACTUAL BURST PRESSURE:
15 *MIN.*	0 *PSI*

Hose Assembly Serial Number:	Hose Serial Number:
79793	OKC

Comments:

Date:	Tested:	Approved:
3/8/2011		

Midwest Hose & Specialty, Inc.

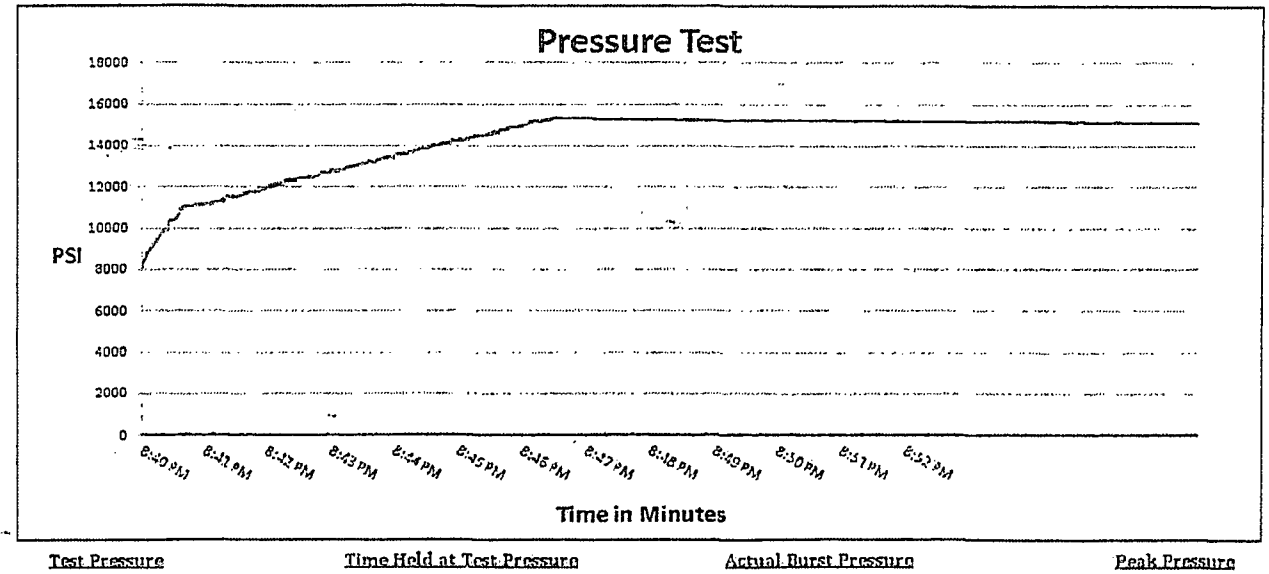
Internal Hydrostatic Test Graph

March 3, 2011

Customer: Houston

Pick Ticket #: 94260

Hose Specifications		Verification	
Hose Type	Length	Type of Fitting	Coupling Method
C & K	45'	4 1/16 10K	Swage
I.D.	O.D.	Die Size	Final O.D.
4"	6.09"	6.38"	6.25"
Working Pressure	Burst Pressure	Hose Serial #	Hose Assembly Serial #
10000 PSI	Standard Safety Multiplier Applies	5544	79793



Test Pressure	Time Held at Test Pressure	Actual Burst Pressure	Peak Pressure
15000 PSI	11 Minutes		15483 PSI

Comments: Hose assembly pressure tested with water at ambient temperature.

Tested By: *Zac Mcconnell*

Approved By: *Kim Thomas*

Exhibit F-1 – Co-Flex Hose Hydrostatic Test
Red Hills Unit 25H
Cimarex Energy Co.
Sec. 5-26S-33E
SHL 330' FNL & 1330' FEL
BHL 330' FSL & 2200' FEL
Lea County, NM

Exhibit F-2 – Co-Flex Hose
Red Hills Unit 25H
Cimarex Energy Co.
Sec. 5-26S-33E
SHL 330' FNL & 1330' FEL
BHL 330' FSL & 2200' FEL
Lea County, NM

Midwest Hose & Specialty, Inc.

Certificate of Conformity

Customer:	PO
DEM	ODYD-271

SPECIFICATIONS

Sales Order	Dated:
79793	3/8/2011

We hereby cerify that the material supplied for the referenced purchase order to be true according to the requirements of the purchase order and current industry standards

Supplier:
Midwest Hose & Specialty, Inc.
10640 Tanner Road
Houston, Texas 77041

Comments:

Approved:	Date:
Jamal Garcia	3/8/2011

Midwest Hose & Specialty, Inc.

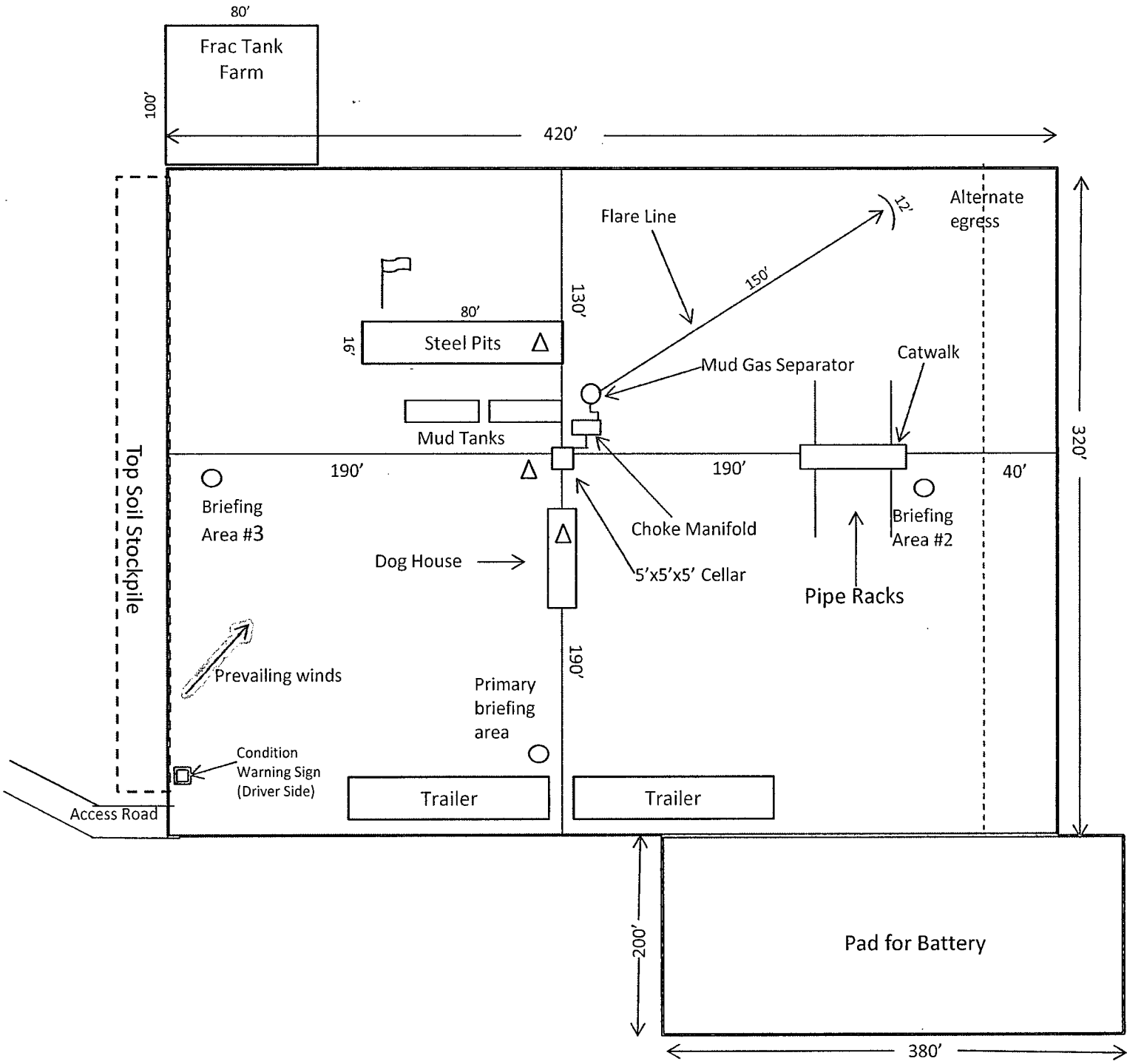
Exhibit F -3– Co-Flex Hose
Red Hills Unit 25H
Cimarex Energy Co.
Sec. 5-26S-33E
SHL 330' FNL & 1330' FEL
BHL 330' FSL & 2200' FEL
Lea County, NM

Specification Sheet
Choke & Kill Hose

The Midwest Hose & Specialty Choke & Kill hose is manufactured with only premium componets.The reinforcement cables, inner liner and cover are made of the highest quality material to handle the tough drilling applications of today's industry. The end connections are available with API flanges, API male threads, hubs, hammer unions or other special fittings upon request. Hose assembly is manufactured to API 7K. This assembly is wrapped with fire resistant vermculite coated fiberglass insulation, rated at 2000 degrees with stainless steel armor cover.

Working Pressure:	5,000 or 10,000 psi working pressure
Test Pressure:	10,000 or 15,000 psi test pressure
Reinforcement:	Multiple steel cables
Cover:	Stainless Steel Armor
Inner Tube:	Petroleum resistant, Abrasion resistant
End Fitting:	API flanges, API male threads, threaded or butt weld hammer unions, unibolt and other special connections
Maximum Length:	110 Feet
ID:	2-1/2", 3", 3-1/2", 4"
Operating Temperature:	-22 deg F to +180 deg F (-30 deg C to +82 deg C)

P.O. Box 96558 – 1421 S.E. 29th St. Oklahoma City, OK 73143 * (405) 670-6718 * Fax: (405) 670-6816



Wind Direction Indicators (wind sock or streamers)

△ • H2S Monitors (alarms at bell nipple and shale shaker)

○ Briefing Areas

N

Exhibit D – Rig Layout Diagram
Red Hills Unit 25H
Cimarex Energy Co.
Sec. 5-26S-33E
SHL 330' FNL & 1330' FEL
BHL 330' FSL & 2200' FEL
Lea County, NM

Operator - Land Owner Agreement

Company: **Cimarex Energy Co.**

Proposed Well: **Red Hills Unit 25H**

Federal Lease Number: **NM0106040A & NM0160973**

Please be advised that Cimarex Energy Co. has an agreement with the surface owner, listed below, concerning entry and surface restoration after completion of drilling operations at the above described well.

Richard J (Jeff) Robbins
301 Orla
Jal, NM 88252
575-390-0660

After abandonment of the well, all pits will be filled and levelled and all equipment and trash will be removed from the well site. No other requirements were made concerning restoration of the well site.

9/11/14
Date

Aricka Easterling
Signature Aricka Easterling