

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

HOBBES

JUL 07 2015

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

APPLICATION FOR PERMIT TO DRILL OR REENTER

RECEIVED

1a. Type of Work ☒ DRILL ☐ REENTER		5. Lease Serial No. SHL: NM0392082A; BHL: NM120910
1b. Type of Well ☒ Oil Well ☐ Gas Well ☐ Other ☒ Single Zone ☐ Multiple Zone		6. If Indian, Allottee or Tribe Name
2. Name of Operator Cimarex Energy Co. <i>OF COLORADO (162683)</i>		7. If Unit or CA Agreement, Name and No.
3a. Address 600 N. Marienfield St. Ste. 600 Midland Tx 79071		8. Lease Name and Well No. Hallertau 5 Federal Com #6H <i>(38718)</i>
3b. Phone No. (include area code) 432-571-7800		9. API Well No. 30025 <i>42673</i>
4. Location of Well (Report location clearly and in accordance with any State requirements.)* At Surface 205 FSL & 1495 FEL <i>(0)</i> At proposed prod. Zone 330' FNL & 1740' FEL <i>(A)</i> Bone Spring		10. Field and Pool, or Exploratory <i>JENNINGS; AS UPPER SHALE (97838)</i>
14. Distance in miles and direction from nearest town or post office* Malaga is approx. 25 miles to the north west of location.		11. Sec. T. R. M. or Blk. and Survey and Area 5, 26S, 32E
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line if any) 205' FSL	16. No of acres in lease NM0392082A=1400.00 acres NM120910=1218.00 acres	17. Spacing Unit dedicated to this well 160.00
18. Distance from proposed* location to nearest well, drilling, completed, applied for, on this lease, ft. 585' to the # 2H	19. Proposed Depth Pilot Hole TD: N/A 13,960 MD 9,350 TVD	20. BLM/BIA Bond No. on File NM-2575; NMB000835
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3260 GR	22. Approximate date work will start* 1/1/14	23. Estimated duration 30 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:

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

25. Signature <i>Paula Brunson</i>	Name (Printed/Typed) Paula Brunson	Date 11/22/13
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Title Regulatory Compliance	
1/3/ Approved By (Signature) <i>Ed Fernandez for Stephen Caffey</i>	Name (Printed/Typed) CARLSBAD FIELD OFFICE
Title FIELD MANAGER	Office CARLSBAD FIELD OFFICE
Date 6-29-15	

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)

Carlsbad Controlled Water Basin

Approval Subject to General Requirements
& Special Stipulations Attached

SEE ATTACHED FOR
CONDITIONS OF APPROVAL
JUL 09 2015

Application to Drill
Hallertau 5 Federal Com #6H
Cimarex Energy Co.
UL: O, Sec. 5, 26S, 32E
Lea Co., NM

HOBBS OCD

JUL 07 2015

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

1. Location: SHL 205 FSL & 1495 FEL
BHL 330' FNL & 1710' FEL
2. Elevation Above Sea Level: 3,260' 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: 13,960 MD 9,350 TVD Pilot Hole TD: N/A
6. Estimated Tops of Geological Markers:

Formation	Est Top	Bearing
Rustler	1040	N/A
Top Salt	1400	N/A
Castille	2700	N/A
Base Last Salt	4225	N/A
Lamar	4440	N/A
Bell Canyon	4480	N/A
Cherry Canyon	5700	N/A
Brushy Canyon	7375	N/A
Bone Spring	8520	Hydrocarbons
U. Avalon (Leonard)	8675	Hydrocarbons
L. Avalon	9000	Hydrocarbons

7. Possible Mineral Bearing Formation: Shown above

7A. OSE Ground Water Estimated Depth:

8. Casing Program:

See COA for Depth Changes

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	Condition	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	1000	1000	17 1/2	13-3/8"	48.00	H-40	ST&C	New	470	8.3	1.57		3.68	52,320	45,690	7.05
Intermediate	0	4450	4450	12 1/4	9-5/8"	36.00	J-55	LT&C	New	2314	10.0		1.25	1.52	160,200	135,742	3.34
Production	0	8873	8873	8 3/4	5-1/2"	17.00	L-80	LT&C	New	4152	9.0	1.51		1.86	158,950	137,109	2.47
Production	8873	13960	9350	8 3/4	5-1/2"	17.00	L-80	BT&C	New	4375	9.0	1.44		1.77	8,109	6,995	56.76

Application to Drill
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 Cimarex Energy Co.
 UL: O, Sec. 5, 26S, 32E
 Lea Co., NM

8A. Casing Design and Casing Loading Assumptions:

Surface	Tension	A 1.8 design factor with effects of buoyancy: 8.30 ppg.
	Collapse	A 1.125 design factor with full internal evacuation and a collapse force equal to a 8.30 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: 10.00 ppg.
	Collapse	A 1.125 design factor evacuated 1/3 TVD of next casing string with a collapse force equal to a 10.00 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.
Production and/or Production Liner	Tension	A 1.8 design factor with effects of buoyancy: 9.00 ppg.
	Collapse	A 1.125 design factor with full internal evacuation of next casing string with a collapse force equal to a 9.00 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	692	1.75	13.50		1211 Class C + Bentonite + Calcium Chloride + LCM, 8.829 gps water
	Tail	142	1.34	14.80		189 Class C + LCM, 6.32 gps water
	TOC: 0		85% Excess			Centralizers per Onshore Order 2.III.B.1f
Intermediate	Lead	1005	1.88	12.90		1889 35:65 (poz/C) + Salt + Bentonite + LCM + retarder, 9.65 gps water
	Tail	260	1.34	14.80		348 Class C + retarder + LCM, 6.32 gps water
	TOC: 0		81% Excess			
Production	Lead	538	2.40	11.90		1290 35:65 (poz/H) + salt + Sodium Metasilicate + Bentonite + Fluid Loss + Dispersant + LCM + Retarder, 13.80 gps water
	Tail	1424	1.24	14.50		1765 50:50 (poz/H) + Bentonite + Salt + Fluid Loss + Dispersant + LCM + Retarder, 5.55 gps water
	TOC: 4250 4200		25% 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

8791
 KOP: 8,873'

9041 operator
 EOC: 9,623' **change**

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

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.

See COA

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.

Application to Drill
Hallertau 5 Federal Com #6H
Cimarex Energy Co.
UL: O, Sec. 5, 26S, 32E
Lea Co., NM

11. Proposed Mud Circulating System:

Depth	Mud Weight	Visc	Fluid Loss	Type Mud
0' to 1090' 1215		8.30 28	NC	FW Spud Mud
1090' to 4400		10.00 30-32	NC	Brine Water
4450' to 13960'		9.00 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 4450 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: **see COA for H₂S**

No abnormal pressures or temperatures are expected. In accordance with Onshore Order 6, Cimarex does not anticipate that there will be enough H₂S from the surface to the Bone Spring formations to meet the BLM's minimum requirements for the submission of an "H₂S Drilling Operation Plan" or "Public Protection Plan" for the drilling and completion of this well. Since we have an H₂S Safety package on all wells, attached is an "H₂S 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: 4208 psi

Estimated BHT: 155°

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: 30 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 potential as **Oil**

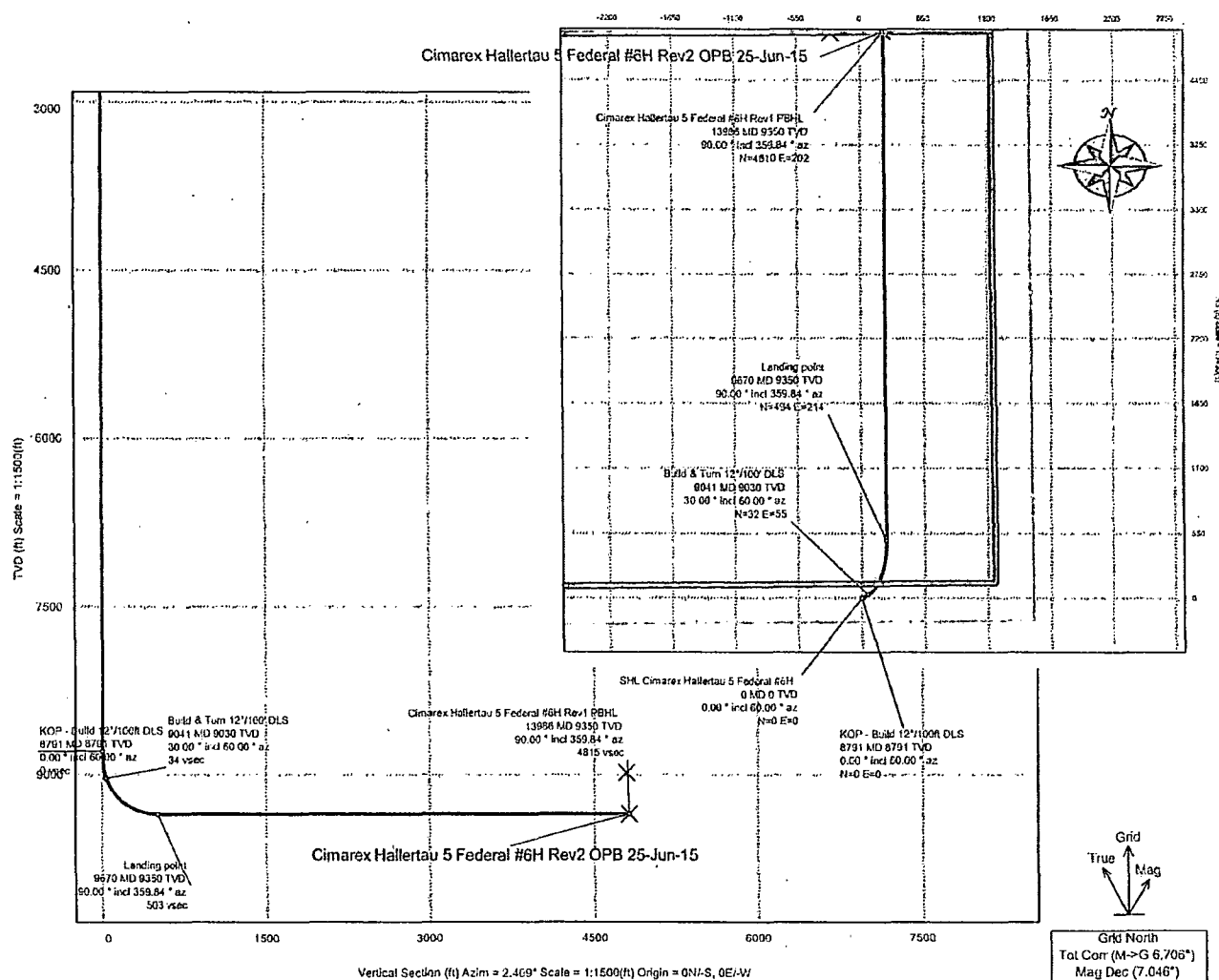
Schlumberger

Cimarex



Borehole:	Well:	Field:	Structure:
Original Borehole	Hallertau 5 Federal #6H	NM Lea County (NAD 83)	TBD

Gravity & Magnetic Parameters	Surface Location	Miscellaneous
Model: HOGM 2015 Dip: 59.754° Date: 26-Jun-2015	NAD83 New Mexico State Plane, Eastern Zone, US Feet	Notes:
MagDec: 7.046° FS: 48166.822±7 Gravity FS: 982.688mgn (9.20665 Based)	Lat: N 32 3 55.78 Northing: 398149.61US Grid Conv: 0.3397°	Site: Hallertau 5 TVD Ref: Ground Level (3269ft above MSL)
	Lon: W 103 41 38.43 Easting: 739548HUS Scale Fact: 0.3395403	Plan: Cimarex Hallertau 5 Federal #6H Rev2 OPB 25-Jun-15



Critical Points								
Critical Point	MD	INCL	AZIM	TVD	VSEC	N(+)/S(-)	E(+)/W(-)	DLS
SHL Cimarex Hallertau 5 Federal #6H	0.00	0.00	60.00	0.00	0.00	0.00	0.00	
KOP - Build 12°/100ft DLS	8791.00	0.00	60.00	8791.00	0.00	0.00	0.00	0.00
Build & Turn 12°/100' DLS	9041.00	30.00	60.00	9029.73	34.28	31.98	55.40	12.00
Landing point	9670.09	90.00	359.84	9350.00	502.83	494.25	214.50	12.02
Cimarex Hallertau 5 Federal #6H Rev1 PBHL	13986.29	90.00	359.84	9350.00	4814.69	4810.43	202.41	0.00

CONTROLLED	
Plan ref	Cimarex Hallertau 5 Federal #6H Rev2 OPB 25-Jun-15
Drawing ref	
Copy number	of 3
Date	26-Jun-2015
1	Client
2	Client
3	Office
4	Office
Copy number	for

Cimarex Hallertau 5 Federal #6H Rev2 OPB 25-Jun-15 Proposal Report

(Non-Def Plan)

Report Date:	June 26, 2015 - 11:14 AM	Survey / DLS Computation:	Minimum Curvature / Lubinski
Client:	Cimarex	Vertical Section Azimuth:	2.409 ° (Grid North)
Field:	NM Lea County (NAD 83)	Vertical Section Origin:	0.000 ft, 0.000 ft
Structure / Slot:	Cimarex Hallertau 5 Federal #6H / Cimarex Hallertau 5 Federal #6H	TVD Reference Datum:	Ground Level
Well:	Cimarex Hallertau 5 Federal #6H	TVD Reference Elevation:	3260.000 ft above MSL
Borehole:	Original Borehole	Seabed / Ground Elevation:	3260.000 ft above MSL
UWI / API#:	Unknown / Unknown	Magnetic Declination:	7.048 °
Survey Name:	Cimarex Hallertau 5 Federal #6H Rev2 OPB 25-Jun-15	Total Gravity Field Strength:	998.6884mgn (9.80665 Based)
Survey Date:	November 18, 2013	Gravity Model:	DOX
Tort / AHD / DDI / ERD Ratio:	105.594 ° / 4886.414 ft / 5.888 / 0.523	Total Magnetic Field Strength:	48166.892 nT
Coordinate Reference System:	NAD83 New Mexico State Plane, Eastern Zone, US Feet	Magnetic Dip Angle:	59.794 °
Location Lat / Long:	N 32° 3' 55.75592", W 103° 41' 36.49431"	Declination Date:	June 26, 2015
Location Grid N/E Y/X:	N 388149.600 ftUS, E 739548.000 ftUS	Magnetic Declination Model:	HDGM 2015
CRS Grid Convergence Angle:	0.3397 °	North Reference:	Grid North
Grid Scale Factor:	0.99995409	Grid Convergence Used:	0.3397 °
Version / Patch:	2.8.572.0	Total Corr Mag North->Grid North:	6.7063 °
		Local Coord Referenced To:	Structure Reference Point

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
SHL Cimarex Hallertau 5 Federal #6H KOP - Build	0.00	0.00	60.00	0.00	0.00	0.00	0.00	N/A	388149.60	739548.00	N 32 3 55.76	W 103 41 36.49
12"/100ft DLS Build & Turn	8791.00	0.00	60.00	8791.00	0.00	0.00	0.00	0.00	388149.60	739548.00	N 32 3 55.76	W 103 41 36.49
12"/100' DLS Landing point	9041.00	30.00	60.00	9029.73	34.28	31.98	55.40	12.00	388181.58	739603.40	N 32 3 56.07	W 103 41 35.85
Cimarex Hallertau 5 Federal #6H Rev1 PBHL	9870.09	90.00	359.84	9350.00	502.83	494.25	214.50	12.02	388643.83	739762.48	N 32 4 0.83	W 103 41 33.97
	13986.29	90.00	359.84	9350.00	4814.69	4810.43	202.41	0.00	392959.80	739750.40	N 32 4 43.34	W 103 41 33.81

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	8872.500	1/100.000	30.000	30.000	SLB_MWD-POOR	Original Borehole / Cimarex Hallertau 5 Federal #6H Rev2

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
		1	8872.500	13986.286	1/100.000	30.000	30.000	SLB_MWD-STD			Original Borehole / Cimarex Hallertau 5 Federal #6H Rev2	

Cimarex Hallertau 5 Federal #6H Rev2 OPB 25-Jun-15 Proposal Report

(Non-Def Plan)

Report Date: June 26, 2015 - 11:16 AM
Client: Cimarex
Field: NM Lea County (NAD 83)
Structure / Slot: Cimarex Hallertau 5 Federal #6H / Cimarex Hallertau 5 Federal #6H
Well: Cimarex Hallertau 5 Federal #6H
Borehole: Original Borehole
UWI / API#: Unknown / Unknown
Survey Name: Cimarex Hallertau 5 Federal #6H Rev2 OPB 25-Jun-15
Survey Date: November 18, 2013
Tort / AHD / DDI / ERD Ratio: 105.594 * / 4886.414 ft / 5.888 / 0.523
Coordinate Reference System: NAD83 New Mexico State Plane, Eastern Zone, US Feet
Location Lat / Long: N 32° 3' 55.75592", W 103° 41' 36.49431"
Location Grid N/E Y/X: N-388149.600 ftUS, E 739548.000 ftUS
CRS Grid Convergence Angle: 0.3397 *
Grid Scale Factor: 0.99995409
Version / Patch: 2.8.572.0

Survey / DLS Computation: Minimum Curvature / Lubinski
Vertical Section Azimuth: 2.409 ° (Grid North)
Vertical Section Origin: 0.000 ft, 0.000 ft
TVD Reference Datum: Ground Level
TVD Reference Elevation: 3260.000 ft above MSL
Seabed / Ground Elevation: 3260.000 ft above MSL
Magnetic Declination: 7.046 *
Total Gravity Field Strength: 998.6884mgn (9.80665 Based)
Gravity Model: DOX
Total Magnetic Field Strength: 48166.892 nT
Magnetic Dip Angle: 59.794 *
Declination Date: June 26, 2015
Magnetic Declination Model: HDGM 2015
North Reference: Grid North
Grid Convergence Used: 0.3397 *
Total Corr Mag North->Grid North: 6.7063 *
Local Coord Referenced To: Structure Reference Point

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
SHL Cimarex Hallertau 5 Federal #6H	0.00	0.00	60.00	0.00	0.00	0.00	0.00	N/A	388149.60	739548.00	N 32 3 55.76 W 103 41 36.49	
	100.00	0.00	60.00	100.00	0.00	0.00	0.00	0.00	388149.60	739548.00	N 32 3 55.76 W 103 41 36.49	
	200.00	0.00	60.00	200.00	0.00	0.00	0.00	0.00	388149.60	739548.00	N 32 3 55.76 W 103 41 36.49	
	300.00	0.00	60.00	300.00	0.00	0.00	0.00	0.00	388149.60	739548.00	N 32 3 55.76 W 103 41 36.49	
	400.00	0.00	60.00	400.00	0.00	0.00	0.00	0.00	388149.60	739548.00	N 32 3 55.76 W 103 41 36.49	
	500.00	0.00	60.00	500.00	0.00	0.00	0.00	0.00	388149.60	739548.00	N 32 3 55.76 W 103 41 36.49	
	600.00	0.00	60.00	600.00	0.00	0.00	0.00	0.00	388149.60	739548.00	N 32 3 55.76 W 103 41 36.49	
	700.00	0.00	60.00	700.00	0.00	0.00	0.00	0.00	388149.60	739548.00	N 32 3 55.76 W 103 41 36.49	
	800.00	0.00	60.00	800.00	0.00	0.00	0.00	0.00	388149.60	739548.00	N 32 3 55.76 W 103 41 36.49	
	900.00	0.00	60.00	900.00	0.00	0.00	0.00	0.00	388149.60	739548.00	N 32 3 55.76 W 103 41 36.49	
	1000.00	0.00	60.00	1000.00	0.00	0.00	0.00	0.00	388149.60	739548.00	N 32 3 55.76 W 103 41 36.49	
	1100.00	0.00	60.00	1100.00	0.00	0.00	0.00	0.00	388149.60	739548.00	N 32 3 55.76 W 103 41 36.49	
	1200.00	0.00	60.00	1200.00	0.00	0.00	0.00	0.00	388149.60	739548.00	N 32 3 55.76 W 103 41 36.49	
	1300.00	0.00	60.00	1300.00	0.00	0.00	0.00	0.00	388149.60	739548.00	N 32 3 55.76 W 103 41 36.49	
	1400.00	0.00	60.00	1400.00	0.00	0.00	0.00	0.00	388149.60	739548.00	N 32 3 55.76 W 103 41 36.49	
	1500.00	0.00	60.00	1500.00	0.00	0.00	0.00	0.00	388149.60	739548.00	N 32 3 55.76 W 103 41 36.49	
	1600.00	0.00	60.00	1600.00	0.00	0.00	0.00	0.00	388149.60	739548.00	N 32 3 55.76 W 103 41 36.49	
	1700.00	0.00	60.00	1700.00	0.00	0.00	0.00	0.00	388149.60	739548.00	N 32 3 55.76 W 103 41 36.49	
	1800.00	0.00	60.00	1800.00	0.00	0.00	0.00	0.00	388149.60	739548.00	N 32 3 55.76 W 103 41 36.49	
	1900.00	0.00	60.00	1900.00	0.00	0.00	0.00	0.00	388149.60	739548.00	N 32 3 55.76 W 103 41 36.49	

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
	2000.00	0.00	60.00	2000.00	0.00	0.00	0.00	0.00	388149.60	739548.00	N 32 3 55.76	W 103 41 36.49
	2100.00	0.00	60.00	2100.00	0.00	0.00	0.00	0.00	388149.60	739548.00	N 32 3 55.76	W 103 41 36.49
	2200.00	0.00	60.00	2200.00	0.00	0.00	0.00	0.00	388149.60	739548.00	N 32 3 55.76	W 103 41 36.49
	2300.00	0.00	60.00	2300.00	0.00	0.00	0.00	0.00	388149.60	739548.00	N 32 3 55.76	W 103 41 36.49
	2400.00	0.00	60.00	2400.00	0.00	0.00	0.00	0.00	388149.60	739548.00	N 32 3 55.76	W 103 41 36.49
	2500.00	0.00	60.00	2500.00	0.00	0.00	0.00	0.00	388149.60	739548.00	N 32 3 55.76	W 103 41 36.49
	2600.00	0.00	60.00	2600.00	0.00	0.00	0.00	0.00	388149.60	739548.00	N 32 3 55.76	W 103 41 36.49
	2700.00	0.00	60.00	2700.00	0.00	0.00	0.00	0.00	388149.60	739548.00	N 32 3 55.76	W 103 41 36.49
	2800.00	0.00	60.00	2800.00	0.00	0.00	0.00	0.00	388149.60	739548.00	N 32 3 55.76	W 103 41 36.49
	2900.00	0.00	60.00	2900.00	0.00	0.00	0.00	0.00	388149.60	739548.00	N 32 3 55.76	W 103 41 36.49
	3000.00	0.00	60.00	3000.00	0.00	0.00	0.00	0.00	388149.60	739548.00	N 32 3 55.76	W 103 41 36.49
	3100.00	0.00	60.00	3100.00	0.00	0.00	0.00	0.00	388149.60	739548.00	N 32 3 55.76	W 103 41 36.49
	3200.00	0.00	60.00	3200.00	0.00	0.00	0.00	0.00	388149.60	739548.00	N 32 3 55.76	W 103 41 36.49
	3300.00	0.00	60.00	3300.00	0.00	0.00	0.00	0.00	388149.60	739548.00	N 32 3 55.76	W 103 41 36.49
	3400.00	0.00	60.00	3400.00	0.00	0.00	0.00	0.00	388149.60	739548.00	N 32 3 55.76	W 103 41 36.49
	3500.00	0.00	60.00	3500.00	0.00	0.00	0.00	0.00	388149.60	739548.00	N 32 3 55.76	W 103 41 36.49
	3600.00	0.00	60.00	3600.00	0.00	0.00	0.00	0.00	388149.60	739548.00	N 32 3 55.76	W 103 41 36.49
	3700.00	0.00	60.00	3700.00	0.00	0.00	0.00	0.00	388149.60	739548.00	N 32 3 55.76	W 103 41 36.49
	3800.00	0.00	60.00	3800.00	0.00	0.00	0.00	0.00	388149.60	739548.00	N 32 3 55.76	W 103 41 36.49
	3900.00	0.00	60.00	3900.00	0.00	0.00	0.00	0.00	388149.60	739548.00	N 32 3 55.76	W 103 41 36.49
	4000.00	0.00	60.00	4000.00	0.00	0.00	0.00	0.00	388149.60	739548.00	N 32 3 55.76	W 103 41 36.49
	4100.00	0.00	60.00	4100.00	0.00	0.00	0.00	0.00	388149.60	739548.00	N 32 3 55.76	W 103 41 36.49
	4200.00	0.00	60.00	4200.00	0.00	0.00	0.00	0.00	388149.60	739548.00	N 32 3 55.76	W 103 41 36.49
	4300.00	0.00	60.00	4300.00	0.00	0.00	0.00	0.00	388149.60	739548.00	N 32 3 55.76	W 103 41 36.49
	4400.00	0.00	60.00	4400.00	0.00	0.00	0.00	0.00	388149.60	739548.00	N 32 3 55.76	W 103 41 36.49
	4500.00	0.00	60.00	4500.00	0.00	0.00	0.00	0.00	388149.60	739548.00	N 32 3 55.76	W 103 41 36.49
	4600.00	0.00	60.00	4600.00	0.00	0.00	0.00	0.00	388149.60	739548.00	N 32 3 55.76	W 103 41 36.49
	4700.00	0.00	60.00	4700.00	0.00	0.00	0.00	0.00	388149.60	739548.00	N 32 3 55.76	W 103 41 36.49
	4800.00	0.00	60.00	4800.00	0.00	0.00	0.00	0.00	388149.60	739548.00	N 32 3 55.76	W 103 41 36.49
	4900.00	0.00	60.00	4900.00	0.00	0.00	0.00	0.00	388149.60	739548.00	N 32 3 55.76	W 103 41 36.49
	5000.00	0.00	60.00	5000.00	0.00	0.00	0.00	0.00	388149.60	739548.00	N 32 3 55.76	W 103 41 36.49
	5100.00	0.00	60.00	5100.00	0.00	0.00	0.00	0.00	388149.60	739548.00	N 32 3 55.76	W 103 41 36.49
	5200.00	0.00	60.00	5200.00	0.00	0.00	0.00	0.00	388149.60	739548.00	N 32 3 55.76	W 103 41 36.49
	5300.00	0.00	60.00	5300.00	0.00	0.00	0.00	0.00	388149.60	739548.00	N 32 3 55.76	W 103 41 36.49
	5400.00	0.00	60.00	5400.00	0.00	0.00	0.00	0.00	388149.60	739548.00	N 32 3 55.76	W 103 41 36.49
	5500.00	0.00	60.00	5500.00	0.00	0.00	0.00	0.00	388149.60	739548.00	N 32 3 55.76	W 103 41 36.49
	5600.00	0.00	60.00	5600.00	0.00	0.00	0.00	0.00	388149.60	739548.00	N 32 3 55.76	W 103 41 36.49
	5700.00	0.00	60.00	5700.00	0.00	0.00	0.00	0.00	388149.60	739548.00	N 32 3 55.76	W 103 41 36.49
	5800.00	0.00	60.00	5800.00	0.00	0.00	0.00	0.00	388149.60	739548.00	N 32 3 55.76	W 103 41 36.49
	5900.00	0.00	60.00	5900.00	0.00	0.00	0.00	0.00	388149.60	739548.00	N 32 3 55.76	W 103 41 36.49
	6000.00	0.00	60.00	6000.00	0.00	0.00	0.00	0.00	388149.60	739548.00	N 32 3 55.76	W 103 41 36.49
	6100.00	0.00	60.00	6100.00	0.00	0.00	0.00	0.00	388149.60	739548.00	N 32 3 55.76	W 103 41 36.49
	6200.00	0.00	60.00	6200.00	0.00	0.00	0.00	0.00	388149.60	739548.00	N 32 3 55.76	W 103 41 36.49
	6300.00	0.00	60.00	6300.00	0.00	0.00	0.00	0.00	388149.60	739548.00	N 32 3 55.76	W 103 41 36.49
	6400.00	0.00	60.00	6400.00	0.00	0.00	0.00	0.00	388149.60	739548.00	N 32 3 55.76	W 103 41 36.49
	6500.00	0.00	60.00	6500.00	0.00	0.00	0.00	0.00	388149.60	739548.00	N 32 3 55.76	W 103 41 36.49
	6600.00	0.00	60.00	6600.00	0.00	0.00	0.00	0.00	388149.60	739548.00	N 32 3 55.76	W 103 41 36.49
	6700.00	0.00	60.00	6700.00	0.00	0.00	0.00	0.00	388149.60	739548.00	N 32 3 55.76	W 103 41 36.49

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)		Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
	6800.00	0.00	60.00	6800.00	0.00	0.00	0.00	0.00	388149.60	739548.00	N 32	3 55.76	W 103 41 36.49
	6900.00	0.00	60.00	6900.00	0.00	0.00	0.00	0.00	388149.60	739548.00	N 32	3 55.76	W 103 41 36.49
	7000.00	0.00	60.00	7000.00	0.00	0.00	0.00	0.00	388149.60	739548.00	N 32	3 55.76	W 103 41 36.49
	7100.00	0.00	60.00	7100.00	0.00	0.00	0.00	0.00	388149.60	739548.00	N 32	3 55.76	W 103 41 36.49
	7200.00	0.00	60.00	7200.00	0.00	0.00	0.00	0.00	388149.60	739548.00	N 32	3 55.76	W 103 41 36.49
	7300.00	0.00	60.00	7300.00	0.00	0.00	0.00	0.00	388149.60	739548.00	N 32	3 55.76	W 103 41 36.49
	7400.00	0.00	60.00	7400.00	0.00	0.00	0.00	0.00	388149.60	739548.00	N 32	3 55.76	W 103 41 36.49
	7500.00	0.00	60.00	7500.00	0.00	0.00	0.00	0.00	388149.60	739548.00	N 32	3 55.76	W 103 41 36.49
	7600.00	0.00	60.00	7600.00	0.00	0.00	0.00	0.00	388149.60	739548.00	N 32	3 55.76	W 103 41 36.49
	7700.00	0.00	60.00	7700.00	0.00	0.00	0.00	0.00	388149.60	739548.00	N 32	3 55.76	W 103 41 36.49
	7800.00	0.00	60.00	7800.00	0.00	0.00	0.00	0.00	388149.60	739548.00	N 32	3 55.76	W 103 41 36.49
	7900.00	0.00	60.00	7900.00	0.00	0.00	0.00	0.00	388149.60	739548.00	N 32	3 55.76	W 103 41 36.49
	8000.00	0.00	60.00	8000.00	0.00	0.00	0.00	0.00	388149.60	739548.00	N 32	3 55.76	W 103 41 36.49
	8100.00	0.00	60.00	8100.00	0.00	0.00	0.00	0.00	388149.60	739548.00	N 32	3 55.76	W 103 41 36.49
	8200.00	0.00	60.00	8200.00	0.00	0.00	0.00	0.00	388149.60	739548.00	N 32	3 55.76	W 103 41 36.49
	8300.00	0.00	60.00	8300.00	0.00	0.00	0.00	0.00	388149.60	739548.00	N 32	3 55.76	W 103 41 36.49
	8400.00	0.00	60.00	8400.00	0.00	0.00	0.00	0.00	388149.60	739548.00	N 32	3 55.76	W 103 41 36.49
	8500.00	0.00	60.00	8500.00	0.00	0.00	0.00	0.00	388149.60	739548.00	N 32	3 55.76	W 103 41 36.49
	8600.00	0.00	60.00	8600.00	0.00	0.00	0.00	0.00	388149.60	739548.00	N 32	3 55.76	W 103 41 36.49
	8700.00	0.00	60.00	8700.00	0.00	0.00	0.00	0.00	388149.60	739548.00	N 32	3 55.76	W 103 41 36.49
KOP - Build 12°/100ft DLS	8791.00	0.00	60.00	8791.00	0.00	0.00	0.00	0.00	388149.60	739548.00	N 32	3 55.76	W 103 41 36.49
	8800.00	1.08	60.00	8800.00	0.05	0.04	0.07	12.00	388149.64	739548.07	N 32	3 55.76	W 103 41 36.49
	8900.00	13.08	60.00	8899.06	6.64	6.19	10.73	12.00	388155.79	739558.73	N 32	3 55.82	W 103 41 36.37
	9000.00	25.08	60.00	8993.39	24.13	22.51	38.99	12.00	388172.11	739586.98	N 32	3 55.98	W 103 41 36.04
Build & Turn 12°/100' DLS	9041.00	30.00	60.00	9029.73	34.28	31.98	55.40	12.00	388181.58	739603.40	N 32	3 56.07	W 103 41 35.85
	9100.00	33.70	48.51	9079.89	53.56	50.23	80.46	12.02	388199.82	739628.46	N 32	3 56.25	W 103 41 35.56
	9200.00	41.80	33.91	9159.05	101.39	96.43	119.98	12.02	388246.03	739667.98	N 32	3 56.70	W 103 41 35.09
	9300.00	51.22	23.57	9227.90	166.39	160.05	154.28	12.02	388309.64	739702.27	N 32	3 57.33	W 103 41 34.69
	9400.00	61.33	15.74	9283.41	245.72	238.28	181.87	12.02	388387.87	739729.86	N 32	3 58.10	W 103 41 34.36
	9500.00	71.81	9.31	9323.16	335.89	327.71	201.52	12.02	388477.29	739749.51	N 32	3 58.99	W 103 41 34.13
	9600.00	82.47	3.63	9345.40	432.96	424.41	212.39	12.02	388573.99	739760.38	N 32	3 59.94	W 103 41 34.00
Landing point	9670.09	90.00	359.84	9350.00	502.83	494.25	214.50	12.02	388643.83	739762.49	N 32	4 0.63	W 103 41 33.97
	9700.00	90.00	359.84	9350.00	532.71	524.16	214.41	0.00	388673.74	739762.40	N 32	4 0.93	W 103 41 33.97
	9800.00	90.00	359.84	9350.00	632.61	624.16	214.13	0.00	388773.73	739762.12	N 32	4 1.92	W 103 41 33.96
	9900.00	90.00	359.84	9350.00	732.51	724.16	213.85	0.00	388873.73	739761.84	N 32	4 2.91	W 103 41 33.96
	10000.00	90.00	359.84	9350.00	832.41	824.16	213.57	0.00	388973.72	739761.56	N 32	4 3.90	W 103 41 33.96
	10100.00	90.00	359.84	9350.00	932.31	924.16	213.29	0.00	389073.72	739761.28	N 32	4 4.89	W 103 41 33.95
	10200.00	90.00	359.84	9350.00	1032.21	1024.16	213.01	0.00	389173.71	739761.00	N 32	4 5.88	W 103 41 33.95
	10300.00	90.00	359.84	9350.00	1132.11	1124.16	212.73	0.00	389273.71	739760.72	N 32	4 6.87	W 103 41 33.94
	10400.00	90.00	359.84	9350.00	1232.01	1224.16	212.45	0.00	389373.70	739760.44	N 32	4 7.86	W 103 41 33.94
	10500.00	90.00	359.84	9350.00	1331.91	1324.16	212.17	0.00	389473.69	739760.16	N 32	4 8.85	W 103 41 33.94
	10600.00	90.00	359.84	9350.00	1431.81	1424.16	211.89	0.00	389573.69	739759.88	N 32	4 9.84	W 103 41 33.93
	10700.00	90.00	359.84	9350.00	1531.71	1524.16	211.61	0.00	389673.68	739759.60	N 32	4 10.83	W 103 41 33.93
	10800.00	90.00	359.84	9350.00	1631.61	1624.16	211.33	0.00	389773.68	739759.32	N 32	4 11.81	W 103 41 33.93
	10900.00	90.00	359.84	9350.00	1731.51	1724.16	211.05	0.00	389873.67	739759.04	N 32	4 12.80	W 103 41 33.92
	11000.00	90.00	359.84	9350.00	1831.40	1824.16	210.77	0.00	389973.67	739758.76	N 32	4 13.79	W 103 41 33.92

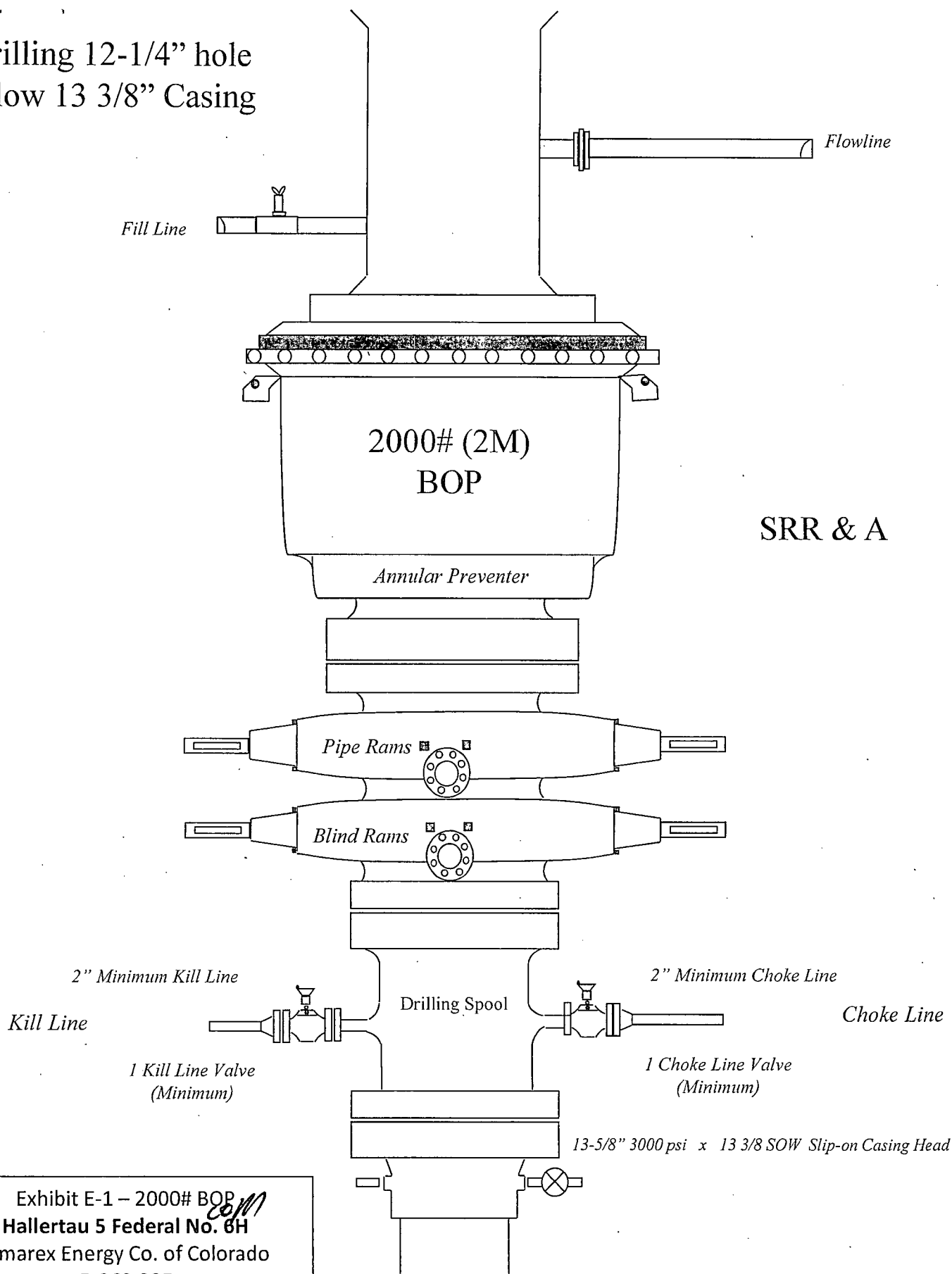
Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
	11100.00	90.00	359.84	9350.00	1931.30	1924.16	210.49	0.00	390073.66	739758.48	N 32 4 14.78	W 103 41 33.92
	11200.00	90.00	359.84	9350.00	2031.20	2024.16	210.21	0.00	390173.66	739758.20	N 32 4 15.77	W 103 41 33.91
	11300.00	90.00	359.84	9350.00	2131.10	2124.16	209.93	0.00	390273.65	739757.92	N 32 4 16.76	W 103 41 33.91
	11400.00	90.00	359.84	9350.00	2231.00	2224.15	209.65	0.00	390373.65	739757.64	N 32 4 17.75	W 103 41 33.90
	11500.00	90.00	359.84	9350.00	2330.90	2324.15	209.37	0.00	390473.64	739757.36	N 32 4 18.74	W 103 41 33.90
	11600.00	90.00	359.84	9350.00	2430.80	2424.15	209.09	0.00	390573.64	739757.08	N 32 4 19.73	W 103 41 33.90
	11700.00	90.00	359.84	9350.00	2530.70	2524.15	208.81	0.00	390673.63	739756.80	N 32 4 20.72	W 103 41 33.89
	11800.00	90.00	359.84	9350.00	2630.60	2624.15	208.53	0.00	390773.63	739756.52	N 32 4 21.71	W 103 41 33.89
	11900.00	90.00	359.84	9350.00	2730.50	2724.15	208.25	0.00	390873.62	739756.24	N 32 4 22.70	W 103 41 33.89
	12000.00	90.00	359.84	9350.00	2830.40	2824.15	207.97	0.00	390973.62	739755.96	N 32 4 23.69	W 103 41 33.88
	12100.00	90.00	359.84	9350.00	2930.30	2924.15	207.69	0.00	391073.61	739755.68	N 32 4 24.68	W 103 41 33.88
	12200.00	90.00	359.84	9350.00	3030.20	3024.15	207.41	0.00	391173.61	739755.40	N 32 4 25.67	W 103 41 33.88
	12300.00	90.00	359.84	9350.00	3130.10	3124.15	207.13	0.00	391273.60	739755.12	N 32 4 26.66	W 103 41 33.87
	12400.00	90.00	359.84	9350.00	3230.00	3224.15	206.85	0.00	391373.60	739754.84	N 32 4 27.65	W 103 41 33.87
	12500.00	90.00	359.84	9350.00	3329.90	3324.15	206.57	0.00	391473.59	739754.56	N 32 4 28.64	W 103 41 33.86
	12600.00	90.00	359.84	9350.00	3429.80	3424.15	206.29	0.00	391573.59	739754.28	N 32 4 29.63	W 103 41 33.86
	12700.00	90.00	359.84	9350.00	3529.69	3524.15	206.01	0.00	391673.58	739754.00	N 32 4 30.62	W 103 41 33.86
	12800.00	90.00	359.84	9350.00	3629.59	3624.15	205.73	0.00	391773.58	739753.72	N 32 4 31.61	W 103 41 33.85
	12900.00	90.00	359.84	9350.00	3729.49	3724.15	205.45	0.00	391873.57	739753.44	N 32 4 32.60	W 103 41 33.85
	13000.00	90.00	359.84	9350.00	3829.39	3824.15	205.17	0.00	391973.57	739753.16	N 32 4 33.58	W 103 41 33.85
	13100.00	90.00	359.84	9350.00	3929.29	3924.15	204.89	0.00	392073.56	739752.88	N 32 4 34.57	W 103 41 33.84
	13200.00	90.00	359.84	9350.00	4029.19	4024.15	204.61	0.00	392173.55	739752.60	N 32 4 35.56	W 103 41 33.84
	13300.00	90.00	359.84	9350.00	4129.09	4124.15	204.33	0.00	392273.55	739752.32	N 32 4 36.55	W 103 41 33.84
	13400.00	90.00	359.84	9350.00	4228.99	4224.15	204.05	0.00	392373.54	739752.04	N 32 4 37.54	W 103 41 33.83
	13500.00	90.00	359.84	9350.00	4328.89	4324.15	203.77	0.00	392473.54	739751.76	N 32 4 38.53	W 103 41 33.83
	13600.00	90.00	359.84	9350.00	4428.79	4424.15	203.49	0.00	392573.53	739751.48	N 32 4 39.52	W 103 41 33.82
	13700.00	90.00	359.84	9350.00	4528.69	4524.15	203.21	0.00	392673.53	739751.20	N 32 4 40.51	W 103 41 33.82
	13800.00	90.00	359.84	9350.00	4628.59	4624.15	202.93	0.00	392773.52	739750.92	N 32 4 41.50	W 103 41 33.82
	13900.00	90.00	359.84	9350.00	4728.49	4724.14	202.65	0.00	392873.52	739750.64	N 32 4 42.49	W 103 41 33.81
Cimarex Hallertau 5 Federal #6H Rev1 PBHL	13986.29	90.00	359.84	9350.00	4814.69	4810.43	202.41	0.00	392959.80	739750.40	N 32 4 43.34	W 103 41 33.81

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	8872.500	1/100.000	30.000	30.000	SLB_MWD-POOR	Original Borehole / Cimarex Hallertau 5 Federal #6H Rev2
	1	8872.500	13986.286	1/100.000	30.000	30.000	SLB_MWD-STD	Original Borehole / Cimarex Hallertau 5 Federal #6H Rev2

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



SRR & A

Exhibit E-1 – 2000# BOP
Hallertau 5 Federal No. 6H
Cimarex Energy Co. of Colorado
5-26S-32E
SHL 205 FSL & 1495 FEL
BHL 330 FNL & 1710 FEL
Lea County, NM

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

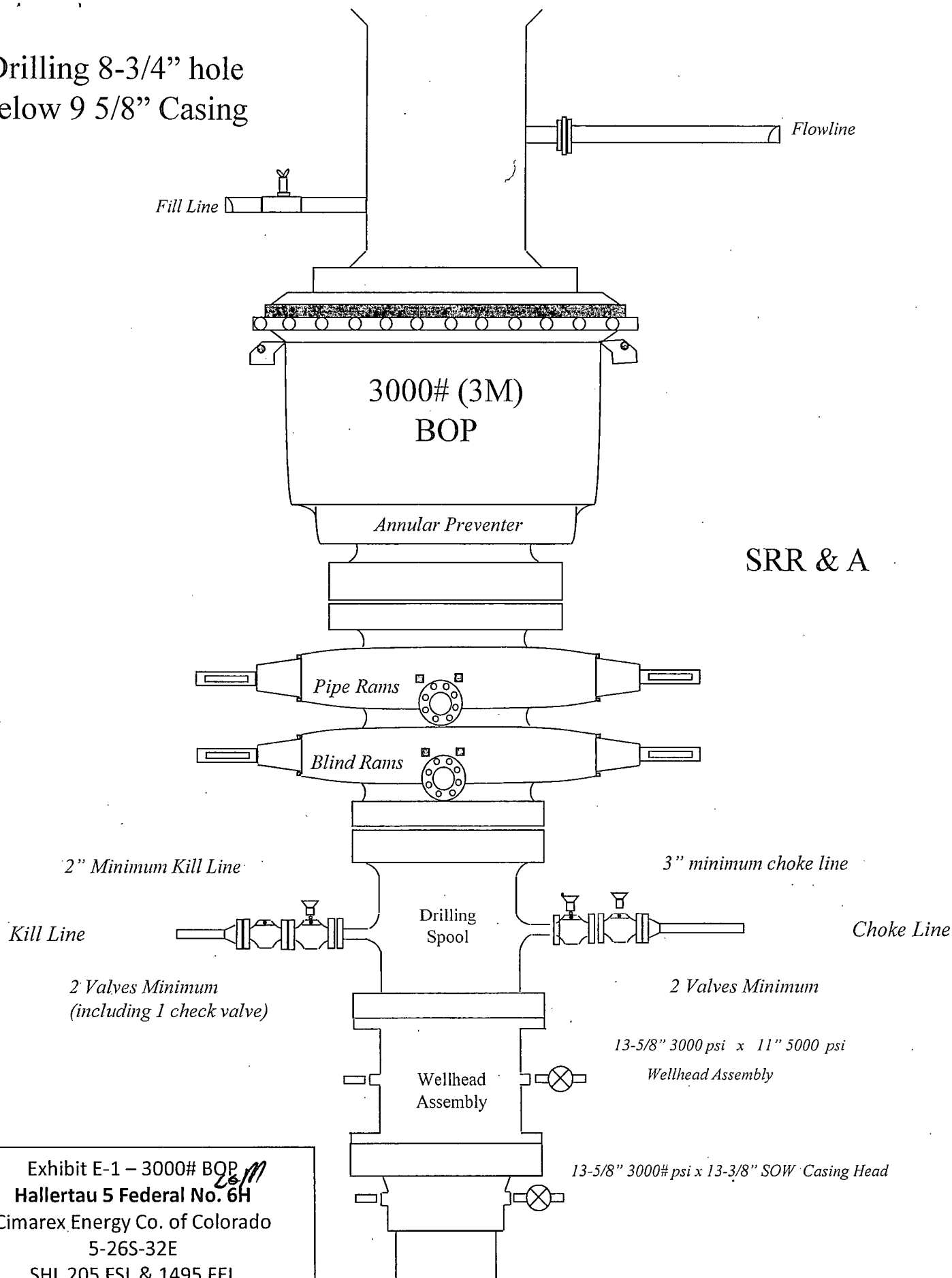
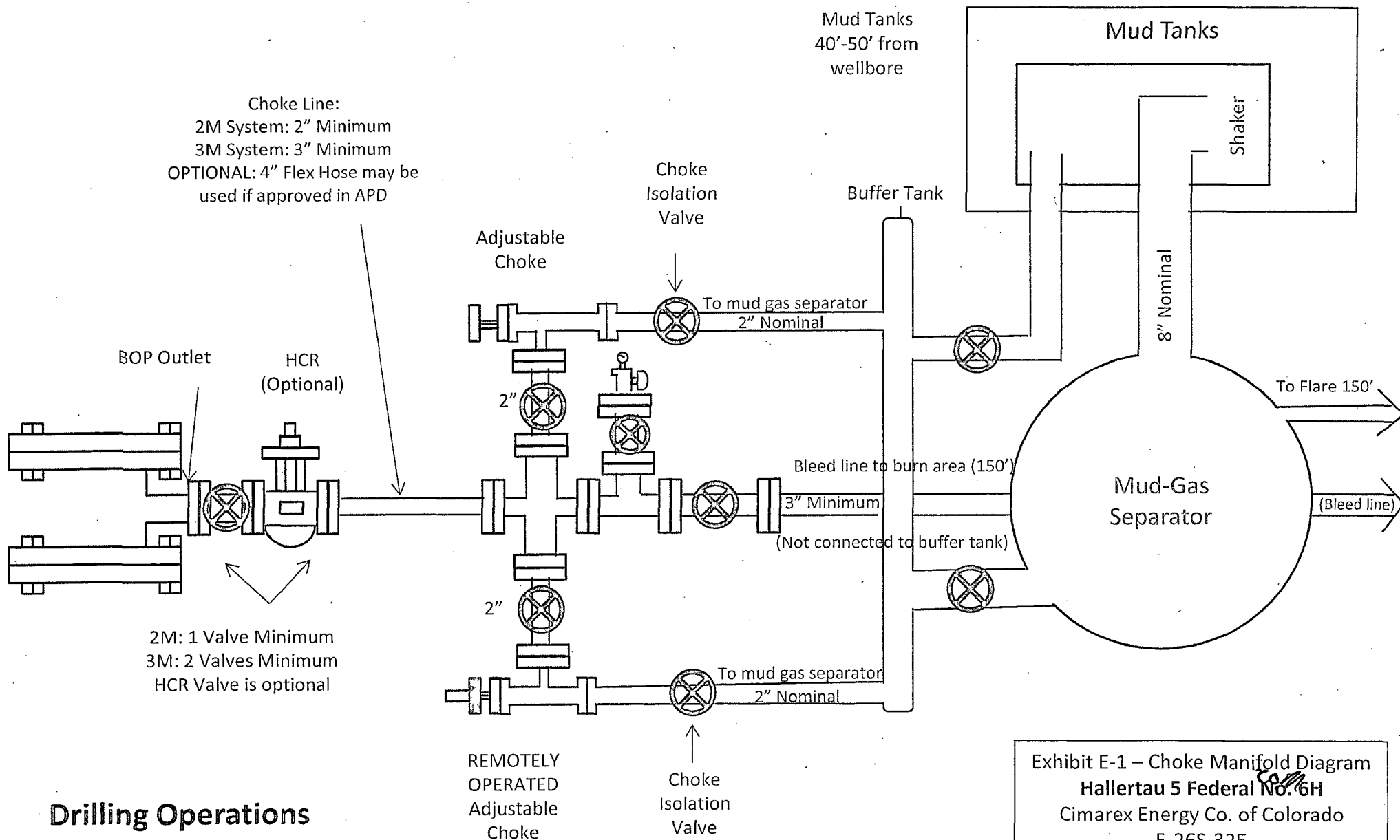


Exhibit E-1 – 3000# BOP
Hallertau 5 Federal No. 6H
Cimarex Energy Co. of Colorado
5-26S-32E
SHL 205 FSL & 1495 FEL
BHL 330 FNL & 1710 FEL
Lea County, NM



Drilling Operations **Choke Manifold** **2M/3M Service**

Exhibit E-1 – Choke Manifold Diagram
Hallertau 5 Federal No. 6H
Cimarex Energy Co. of Colorado
5-26S-32E
SHL 205 FSL & 1495 FEL
BHL 330 FNL & 1710 FEL
Lea County, NM

Exhibit F – Co-Flex Hose
Hallertau 5 Federal No. 6H
Cimarex Energy Co. of Colorado
5-26S-32E
SHL 205 FSL & 1495 FEL
BHL 330 FNL & 1710 FEL
Lea County, NM

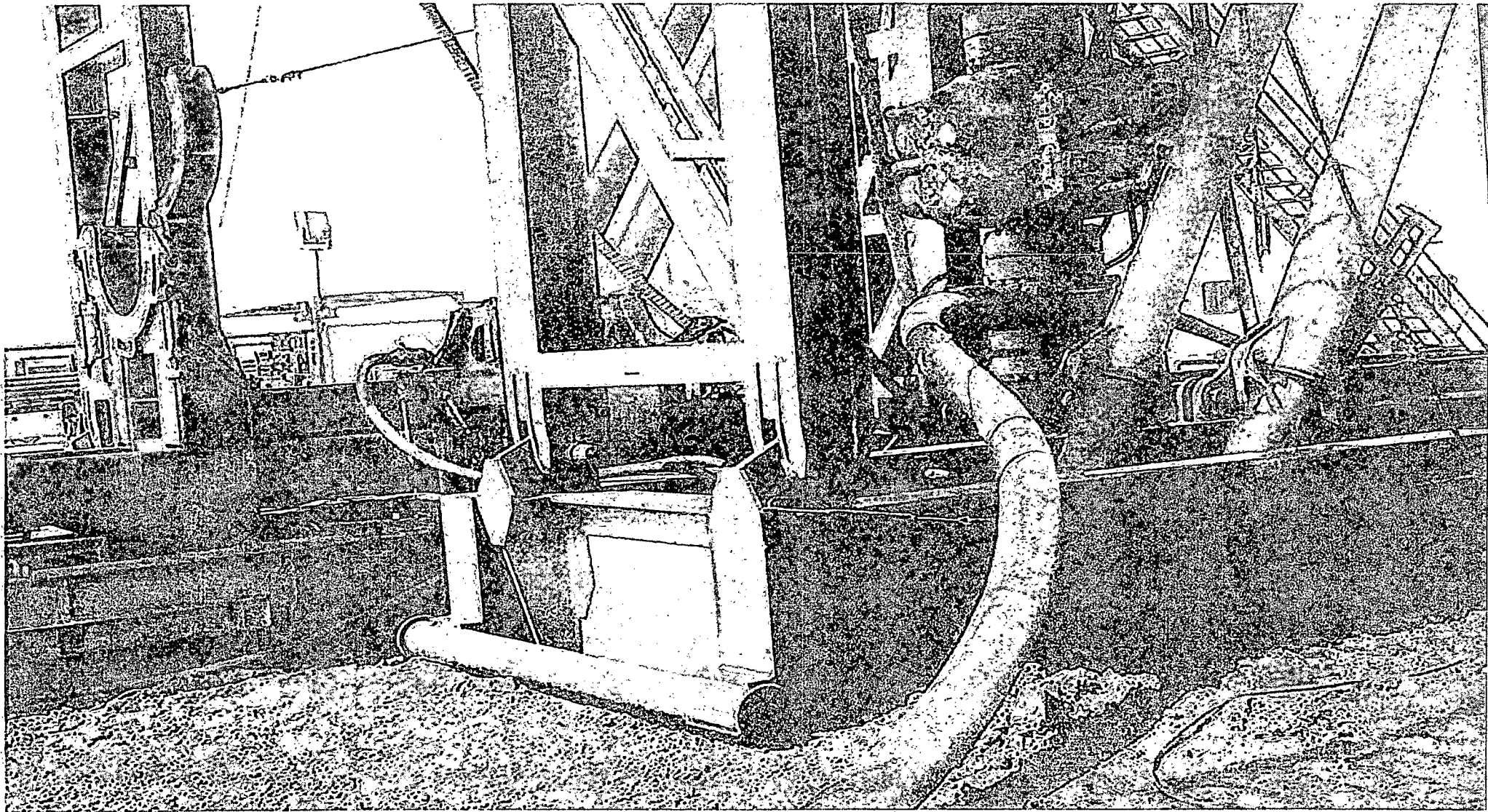


Exhibit F-1 – Co-Flex Hose Hydrostatic Test

Hallertau 5 Federal No. 6H

Cimarex Energy Co. of Colorado

5-26S-32E

SHL 205 FSL & 1495 FEL

BHL 330 FNL & 1710 FEL

Lea County, NM



Midwest Hose & Specialty, Inc.

INTERNAL HYDROSTATIC TEST REPORT

Customer:

Oderco Inc

P.O. Number:

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

10,000 PSI

TEST PRESSURE

15,000 PSI

BURST PRESSURE

0 PSI

COUPLINGS

Stem Part No.

OKC
OKC

Ferrule No.

OKC
OKC

Type of Coupling:

Swage-It

PROCEDURE

Hose assembly pressure tested with water at ambient temperature.

TIME HELD AT TEST PRESSURE

15 MIN.

ACTUAL BURST PRESSURE:

0 PSI

Hose Assembly Serial Number:

79793

Hose Serial Number:

OKC

Comments:

Date:

3/8/2011

Tested:

A. Joann Sauer

Approved:

Kevin J. [Signature]



Midwest Hose
& Specialty, Inc.

Internal Hydrostatic Test Graph

Customer: Houston

Pick Ticket #: 94260

Hose Specifications

Hose Type
C&K

LD

4"

Working Pressure
10000 PSI

Length
43'

O.D.
6.09"

Burst Pressure
Sands and Safety Multiplier Applies

Verification

Type of Fittings
41/1610K

Die Size
6.38"

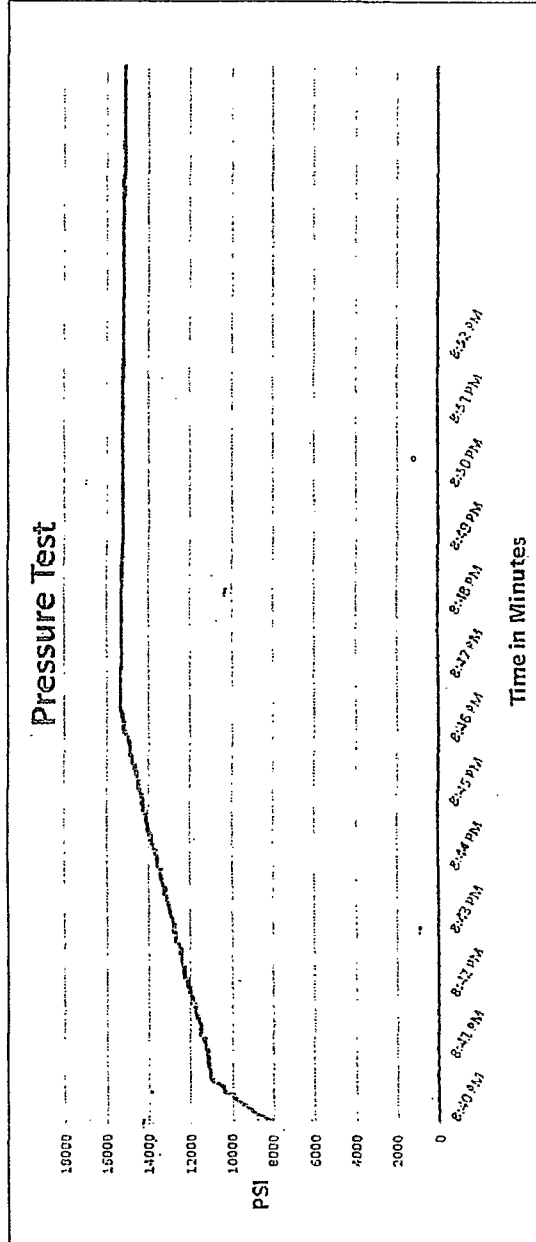
Hose Serial #
5544

Coupling Method
Swage

Final O.D.
6.25"

Hose Assembly Serial #
79793

Exhibit F-1 - Co-Flex Hose Hydrostatic Test
Hallertau 5 Federal No. 6H
Cimarex Energy Co. of Colorado
5-26S-32E
SHL 205 FSL & 1495 FEL
BHL 330 FNL & 1710 FEL
Lea County, NM



Test Pressure
15000 PSI

Time Held at Test Pressure
11 Minutes

Actual Burst Pressure

Peak Pressure
15483 PSI

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

Tested By: Zoe McConnell

Approved By: Kim Thomas

Exhibit F-2 – Co-Flex Hose
Hallertau 5 Federal No. 6H
Cimarex Energy Co. of Colorado
5-26S-32E

SHL 205 FSL & 1495 FEL
BHL 330 FNL & 1710 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 certify 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:
<i>James Garcia</i>		3/8/2011



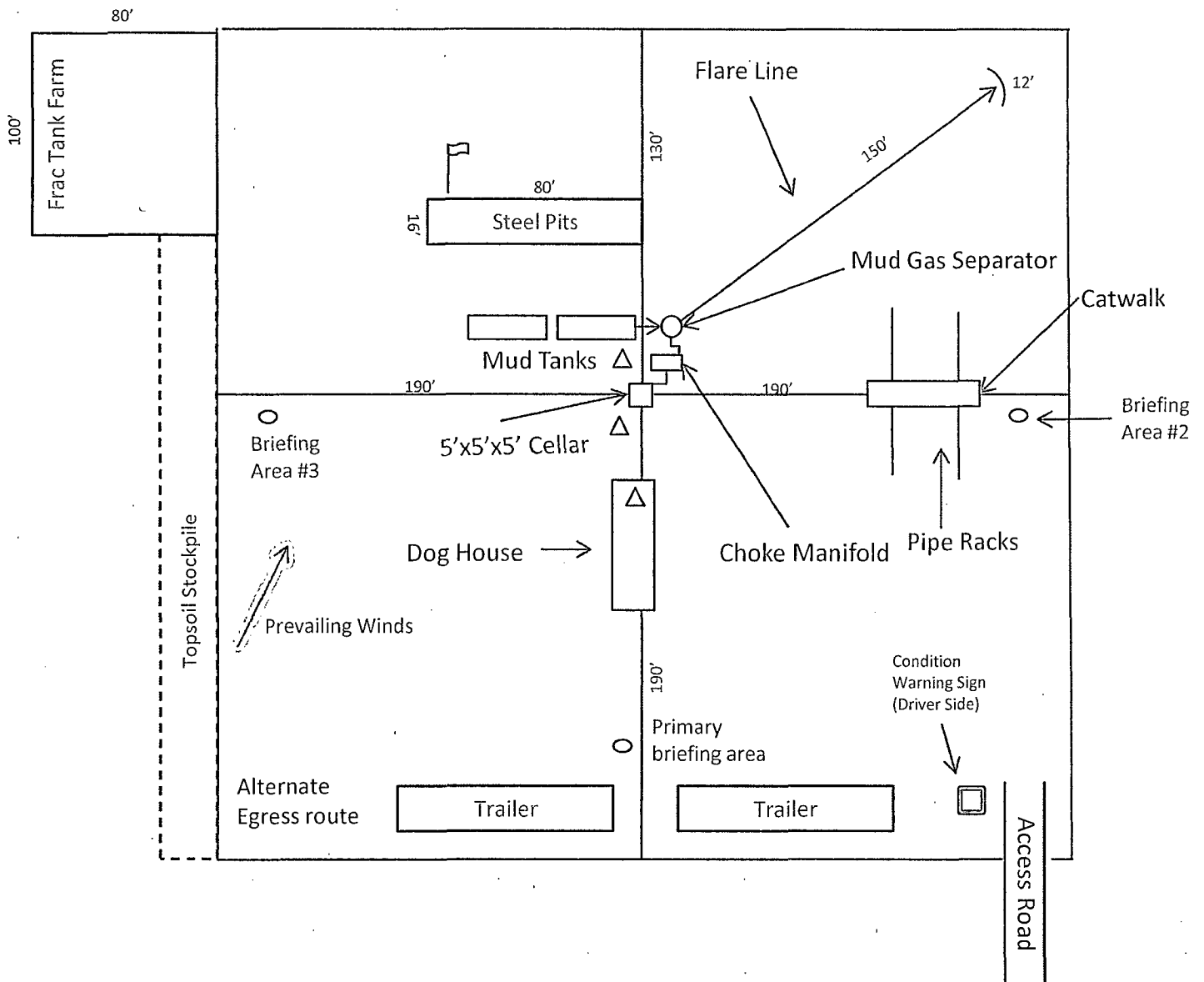
Midwest Hose
& Specialty, Inc.

Exhibit F -3- Co-Flex Hose
Hallertau 5 Federal No. 6H
Cimarex Energy Co. of Colorado
5-26S-32E
SHL 205 FSL & 1495 FEL
BHL 330 FNL & 1710 FEL
Lea County, NM

Specification Sheet Choke & Kill Hose

The Midwest Hose & Specialty Choke & Kill hose is manufactured with only premium components. 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 vermiculite 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, unbolt 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)



Wind Direction Indicators
(wind sock or streamers)



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



Briefing Areas



Exhibit D – Rig Diagram
Hallertau 5 Federal No. 6H
 Cimarex Energy Co. of Colorado
 5-26S-32E
 SHL 205 FSL & 1495 FEL
 BHL 330 FNL & 1710' FEL
 Lea County, NM