

HOBBS OCD

NOV 26 2013

New Mexico Oil Conservation Division, District 2
1626 N. French Drive
Hobbs, NM 88240

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

RECEIVED
UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of Work: ☒ DRILL ☐ REENTER		5. Lease Serial No. SHL NMLC069832; BHL NMLC060850	
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. OF COLORADO		7. If Unit or CA Agreement, Name and No.	
3a. Address 600 N. Marienfeld St. Ste. 600 Midland Tx 79701		8. Lease Name and Well No. San Jacinto 4 Federal Com 4H	
3b. Phone No. (include area code) 432-571-7800		9. API Well No. 30-0000005-29209	
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At Surface 330' FSL & 330' FWL At proposed prod. Zone 330' FSL & 375' FEL		10. Field and Pool, or Exploratory WILDCAT G-05 5153117E1 Abo Wildcat A-10-WC	
14. Distance in miles and direction from nearest town or post office* Approximately 36 miles northeast of Artesia, NM		11. Sec., T. R. M. or Blk. and Survey or Area 4-15S-31E	
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line if any) 330'		12. County or Parish Chaves	
16. No of acres in lease NMLC069832 - 320 acres NMLC060850 - 442.24 acres		13. State NM	
17. Spacing Unit dedicated to this well 160		18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 467'	
19. Proposed Depth 9,500' Pilot Hole 13,152' MD 8,640' TVD		20. BLM/BIA Bond No. on File NM2575; NMB000835	
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 4433' GR		22. Approximate date work will start* 11.01.13	
23. Estimated duration 35-40		24. Attachments ROSWell CONTROLLED WATER BASIN	

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 | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above). |
| 2. A Drilling Plan | 5. Operator Certification |
| 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). | 6. 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 06.25.13
---------------------------------------	---------------------------------------	------------------

Title Regulatory Compliance		
Approved By (Signature) <i>157 Angel Mayes</i>	Name (Printed/Typed) Angel Mayes	Date 11-21-13
Title Assistant Field Manager, Lands And Minerals	Office ROSWell FIELD OFFICE	APPROVED FOR 2 YEARS

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.

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)

RELEASED WATER

CEMENT BEHIND THE 13 3/4"
CASING MUST BE CIRCULATED

WITNESS

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS AND
SPECIAL STIPULATIONS ATTACHED

KZ
11/27/13

DEC 02 2013

Application to Drill
San Jacinto 4 Federal Com 4
 Cimarex Energy Co. of Colorado
 UL M - Sec 4-15S-31E
 Chaves County, 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' FSL & 330' FWL
 BHL 330' FSL & 375' FEL
- 2 Elevation above sea level: 4433' 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: 13,152' MD 8,640' TVD 9,500' Pilot Hole
- 6 Estimated tops of geological markers:

Formation	Est. Top	Bearing
Yates	2312	NA
Queen	3090	Hydrocarbons
San Andres	3940	NA
Abo Shale	7340	Hydrocarbons
Lower Abo Dolomite	8585	NA
Wolfcamp LS	8675	Hydrocarbons

- 7 Possible mineral bearing formation:
 Shown above

7A OSE Ground Water estimated depth: 275'

- 8 Casing Program:

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 (1.125)	Burst SF (1.125)	Cumulative Air Weight (lbs)	Cumulative Bouyed Weight (lbs)	Bouyant Tension SF (1.8)
Surface															
0'	340'	340'	17 1/2	13 3/8	48	H-40	ST&C	New	153	8.4	4.98	11.31	16,320	14,227	22.63
Intermediate															
0'	3950'	3950'	12 1/4	9 5/8	36	J-55	LT&C	New	1,778	10.2	1.32	1.98	142,200	120,056	4.70
Production															
0'	8350'	8350'	8 3/4	5 1/2	17	P-110	LT&C	New	2,374	9.2	1.87	4.48	146,880	126,250	3.52
8350'	13152'	8640'	8 3/4	5 1/2	17	P-110	BT&C	New	4,275	9.2	1.81	2.49	4,930	4,238	128.85

Casing Design Criteria and Casing Loading Assumptions:

Surface

Tension A 1.8 design factor with effects of buoyancy. 8.4 ppg
 Collapse A 1.125 design factor with full internal evacuation and a collapse force equal to a 8.4 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. 10.2 ppg
 Collapse A 1.125 design factor evacuated 1/3 TVD of next casing string with a collapse force equal to a 10.2 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

Tension A 1.8 design factor with effects of buoyancy. 9.2 ppg
 Collapse A 1.125 design factor with full internal evacuation and a collapse force equal to a 9.2 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.

Drilling Plan
San Jacinto 4 Federal Com 4
Cimarex Energy Co. of Colorado
UL M - Sec 4-15S-31E
Chaves County, NM

9 Cementing Program:

Surface	Sacks	Yield (cuft/sx)	Weight (ppg)	Cubic Feet	Cement Blend
Lead	30	1.75	13.5	56	Class C + Bentonite + Calcium Chloride + LCM
Tail	200	1.34	14.8	261	Class C + LCM
TOC: 0' 34% Excess Centralizers per Onshore Order 2.III.B.1f					

Intermediate	Sacks	Yield (cuft/sx)	Weight (ppg)	Cubic Feet	Cement Blend
Lead	980	1.88	12.9	1835	35:65 (poz/C) + Salt + Bentonite + LCM + retarder
Tail	250	1.34	14.8	333	Class C + retarder + LCM
TOC: 0' 82% Excess					

Production	Sacks	Yield (cuft/sx)	Weight (ppg)	Cubic Feet	Cement Blend
Lead	528	2.4	11.9	1266	35:65 (poz/H) + salt + Sodium Metasilicate + Bentonite + Fluid Loss + Dispersant + LCM + Retarder
Tail	1363	1.24	14.5	1690	50:50 (poz/H) + Bentonite + Salt + Fluid Loss + Dispersant + LCM + Retarder

Cement volumes will be adjusted depending on hole size.

TOC: 3750' 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.

10 Pressure Control Equipment:

Exhibit "E-1". A 13½" 5000 PSI working pressure BOP, tested to 3000 psi on the surface casing and 5000 psi on the intermediate, consisting of one set of blind rams and one set of pipe rams and a 5000# annular type preventer. A choke manifold and 120 gallon accumulator with floor and remote operating stations and auxiliary power system. Rotating head 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 unit will be hydraulically operated. BOP will be installed and operated at least once a day while drilling and the blind rams will be operated when out of hole during trips. No abnormal pressure or temperature is expected while drilling.

BOPS will be tested by an independent service company to 250 psi low and 3000 psi high on the surface casing and 250 psi low and 5000 psi high on the intermediate. Hydril will be tested to 250 psi low and 2500 psi high on the surface and intermediate casings.

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
San Jacinto 4 Federal Com 4
 Cimarex Energy Co. of Colorado
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 Chaves County, NM

11 Proposed Mud Circulating System:

Depth			Mud Wt	Visc	Fluid Loss	Type Mud
0'	to	340'	8.4	28	NC	FW Spud Mud
340'	to	3950'	10.2	30-32	NC	Brine water
3950'	to	13152'	9.2	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 Proposed Drilling Plan

Pilot Hole TD: 9,500' KOP: 8,350' EOC: 8989'

Set OH mechanical whipstock w/ 1100 ft of 2.875 tubing and pump 30 bbls of Mudpush @ 12 ppg, followed by 520 sks Type H cement, dispersant 0.080 gals/sk, retarder 0.045 gals/sk @ 17.5 ppg, 0.94 cuft/sk, & 0 % excess from pilot hole TD to KOP. KO lateral and drill through the curve to TD. Run production csg to TD & cement.

13 Testing, Logging and Coring Program:

- A. Mud logging program: 2 man unit from 3950' 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

14 Potential Hazards:

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 **3888 psi** Estimated BHT **150°**

15 Road and location construction will begin after BLM approval of APD. Anticipated spud date as soon as approved.

Drilling expected to take : **35-40**

If production casing is run an additional 30 days will be required to complete and construct surface facilities.

16 Other Facets of Operations:

After running casing, cased hole gamma ray neutron collar logs will be run from TD over possible pay intervals.

Wolfcamp LS pay will be perforated and stimulated.

The proposed well will be tested and potential as **Oil**



Weatherford

Drilling Services

Proposal



SAN JACINTO 4 FED COM #4

CHAVES COUNTY, NEW MEXICO

WELL FILE: **PLAN 1**

OCTOBER 15, 2008

Weatherford International, Ltd.

P.O. Box 61028

Midland, TX 79711 USA

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www.weatherford.com



SAN JACINTO 4 FED COM #4 CHAVES CO., NEW MEXICO



Weatherford

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	8350.00	0.00	0.00	8350.00	0.00	0.00	0.00	0.00	0.00	
3	8989.11	91.51	89.72	8750.00	1.98	410.71	14.32	0.00	410.71	
4	13152.39	91.51	89.72	8640.00	22.05	4572.48	0.00	0.00	4572.53	PBHL

WELL DETAILS

Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
#4	0.00	0.00	741924.80	694250.00	33°02'18.763N	103°50'03.657W	N/A

TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
PBHL	8640.00	22.05	4572.48	741946.85	698822.48	Point

FORMATION TOP DETAILS

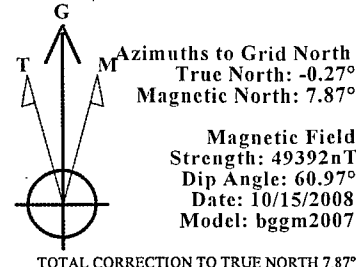
No.	TVDPath	MDPath	Formation
1	8640.00	8674.38	Lower Abo Dolomite
2	8750.00	8967.98	Wolfcamp LS

FIELD DETAILS

Chaves Co., NM (NAD 83)

Geodetic System: US State Plane Coordinate System 1983
Ellipsoid: GRS 1980
Zone: New Mexico, Eastern Zone
Magnetic Model: bggm2007

System Datum: Mean Sea Level
Local North: Grid North

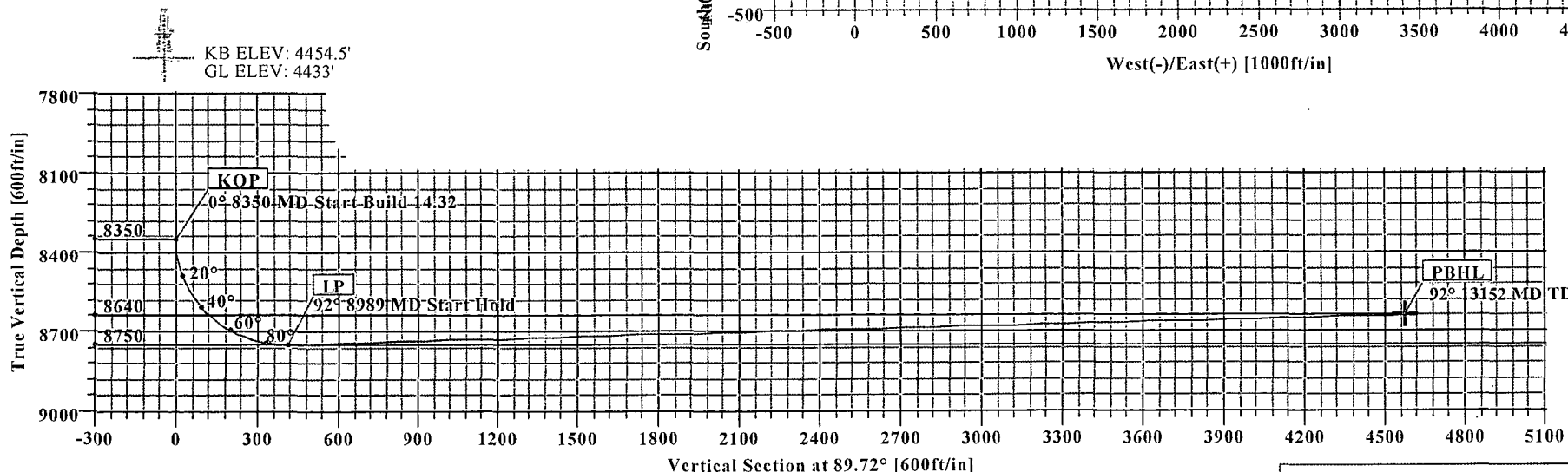
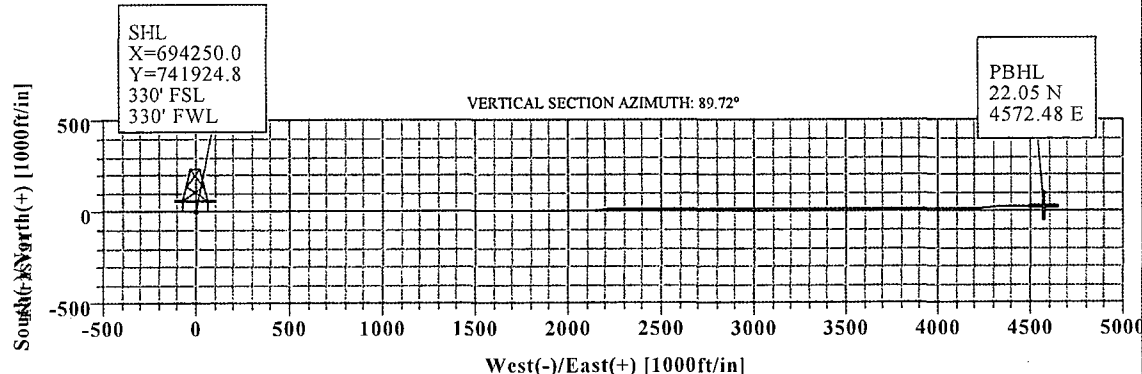


SITE DETAILS

San Jacinto 4 Federal Com #4
330' FSL 330' FWL of SEC 4, T-15-S, R-31-E

Site Centre Northing: 741924.80
Easting: 694250.00

Ground Level: 4433.00
Positional Uncertainty: 0.00
Convergence: 0.27



Plan: Plan #1 (#4/1)

Created By: Lindsey Maddux

Date: 10/15/2008

Weatherford International, Inc.

Proposal Plan Report



Company: Cimarex Field: Chaves Co., NM (NAD 83) Site: San Jacinto 4 Federal Com #4 Well: #4 Wellpath: 1	Date: 10/15/2008 Time: 11:20:56 Page: 1 Co-ordinate(NE) Reference: Well: #4, Grid North Vertical (TVD) Reference: SITE 4454.5 Section (VS) Reference: Well (0.00N,0.00E,89.72Azi) Survey Calculation Method: Minimum Curvature Db: Sybase
--	---

Plan: Plan #1 Principal: Yes	Date Composed: 10/15/2008 Version: 1 Tied-to: From Surface
---	---

Field: Chaves Co., NM (NAD 83)

Map System: US State Plane Coordinate System 1983
Geo Datum: GRS 1980
Sys Datum: Mean Sea Level

Map Zone: New Mexico, Eastern Zone
Coordinate System: Well Centre
Geomagnetic Model: bggm2007

Site: San Jacinto 4 Federal Com #4

 330' FSL 330' FWL of SEC 4, T-15-S, R-31-E

Site Position:	Northing: 741924.80 ft	Latitude: 33 2 18.763 N
From: Map	Easting: 694250.00 ft	Longitude: 103 50 3.657 W
Position Uncertainty: 0.00 ft		North Reference: Grid
Ground Level: 4433.00 ft		Grid Convergence: 0.27 deg

Well: #4	Slot Name:
Well Position: +N/-S 0.00 ft Northing: 741924.80 ft	Latitude: 33 2 18.763 N
+E/-W 0.00 ft Easting: 694250.00 ft	Longitude: 103 50 3.657 W
Position Uncertainty: 0.00 ft	

Wellpath: 1	Drilled From: Surface
Current Datum: SITE	Tie-on Depth: 0.00 ft
Magnetic Data: 10/15/2008	Above System Datum: Mean Sea Level
Field Strength: 49392 nT	Declination: 8.14 deg
Vertical Section: Depth From (TVD)	Mag Dip Angle: 60.97 deg
ft	+N/-S ft
+E/-W ft	Direction deg
0.00	0.00
0.00	0.00
0.00	89.72

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	TFO deg	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8350.00	0.00	0.00	8350.00	0.00	0.00	0.00	0.00	0.00	0.00	
8989.11	91.51	89.72	8750.00	1.98	410.71	14.32	14.32	0.00	0.00	
13152.39	91.51	89.72	8640.00	22.05	4572.48	0.00	0.00	0.00	0.00	PBHL

Survey

MD ft	Incl deg	Azim deg	TVD ft	N/S ft	E/W ft	VS ft	Build deg/100ft	Turn deg/100ft	DLS deg/100ft	TFO deg	Comment
8300.00	0.00	0.00	8300.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8350.00	0.00	0.00	8350.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	KOP
8400.00	7.16	89.72	8399.87	0.02	3.12	3.12	14.32	0.00	14.32	0.00	
8500.00	21.48	89.72	8496.51	0.13	27.79	27.79	14.32	0.00	14.32	0.00	
8600.00	35.80	89.72	8584.05	0.36	75.59	75.59	14.32	0.00	14.32	0.00	
8674.38	46.45	89.72	8640.00	0.60	124.44	124.44	14.32	0.00	14.32	0.00	Lower Abo Dolomite
8700.00	50.12	89.72	8657.05	0.69	143.56	143.56	14.32	0.00	14.32	0.00	
8800.00	64.44	89.72	8710.97	1.10	227.46	227.47	14.32	0.00	14.32	0.00	
8900.00	78.75	89.72	8742.46	1.55	322.10	322.11	14.32	0.00	14.32	0.00	
8967.98	88.49	89.72	8750.00	1.88	389.58	389.58	14.32	0.00	14.32	0.00	Wolfcamp LS
8989.11	91.51	89.72	8750.00	1.98	410.71	410.71	14.32	0.00	14.32	0.00	LP
9000.00	91.51	89.72	8749.71	2.03	421.59	421.60	0.00	0.00	0.00	0.00	
9100.00	91.51	89.72	8747.07	2.52	521.56	521.56	0.00	0.00	0.00	0.00	
9200.00	91.51	89.72	8744.43	3.00	621.52	621.53	0.00	0.00	0.00	0.00	
9300.00	91.51	89.72	8741.79	3.48	721.48	721.49	0.00	0.00	0.00	0.00	
9400.00	91.51	89.72	8739.14	3.96	821.45	821.46	0.00	0.00	0.00	0.00	
9500.00	91.51	89.72	8736.50	4.44	921.41	921.42	0.00	0.00	0.00	0.00	

Weatherford International, Inc.

Proposal Plan Report



Weatherford

Company: Cimarex
Field: Chaves Co., NM (NAD 83)
Site: San Jacinto 4 Federal Com #4
Well: #4
Wellpath: 1

Date: 10/15/2008 Time: 11:20:56 Page: 2
Co-ordinate(NE) Reference: Well: #4, Grid North
Vertical (TVD) Reference: SITE 4454.5
Section (VS) Reference: Well (0.00N,0.00E,89.72Azi)
Survey Calculation Method: Minimum Curvature Db: Sybase

Survey

MD ft	Incl deg	Azim deg	TVD ft	N/S ft	E/W ft	VS ft	Build deg/100ft	Turn deg/100ft	DLS deg/100ft	TFO deg	Comment
9600.00	91.51	89.72	8733.86	4.93	1021.38	1021.39	0.00	0.00	0.00	0.00	
9700.00	91.51	89.72	8731.22	5.41	1121.34	1121.35	0.00	0.00	0.00	0.00	
9800.00	91.51	89.72	8728.57	5.89	1221.30	1221.32	0.00	0.00	0.00	0.00	
9900.00	91.51	89.72	8725.93	6.37	1321.27	1321.28	0.00	0.00	0.00	0.00	
10000.00	91.51	89.72	8723.29	6.85	1421.23	1421.25	0.00	0.00	0.00	0.00	
10100.00	91.51	89.72	8720.65	7.34	1521.20	1521.21	0.00	0.00	0.00	0.00	
10200.00	91.51	89.72	8718.01	7.82	1621.16	1621.18	0.00	0.00	0.00	0.00	
10300.00	91.51	89.72	8715.36	8.30	1721.12	1721.14	0.00	0.00	0.00	0.00	
10400.00	91.51	89.72	8712.72	8.78	1821.09	1821.11	0.00	0.00	0.00	0.00	
10500.00	91.51	89.72	8710.08	9.27	1921.05	1921.07	0.00	0.00	0.00	0.00	
10600.00	91.51	89.72	8707.44	9.75	2021.01	2021.04	0.00	0.00	0.00	0.00	
10700.00	91.51	89.72	8704.80	10.23	2120.98	2121.00	0.00	0.00	0.00	0.00	
10800.00	91.51	89.72	8702.15	10.71	2220.94	2220.97	0.00	0.00	0.00	0.00	
10900.00	91.51	89.72	8699.51	11.19	2320.91	2320.93	0.00	0.00	0.00	0.00	
11000.00	91.51	89.72	8696.87	11.68	2420.87	2420.90	0.00	0.00	0.00	0.00	
11100.00	91.51	89.72	8694.23	12.16	2520.83	2520.86	0.00	0.00	0.00	0.00	
11200.00	91.51	89.72	8691.58	12.64	2620.80	2620.83	0.00	0.00	0.00	0.00	
11300.00	91.51	89.72	8688.94	13.12	2720.76	2720.79	0.00	0.00	0.00	0.00	
11400.00	91.51	89.72	8686.30	13.60	2820.73	2820.76	0.00	0.00	0.00	0.00	
11500.00	91.51	89.72	8683.66	14.09	2920.69	2920.72	0.00	0.00	0.00	0.00	
11600.00	91.51	89.72	8681.02	14.57	3020.65	3020.69	0.00	0.00	0.00	0.00	
11700.00	91.51	89.72	8678.37	15.05	3120.62	3120.65	0.00	0.00	0.00	0.00	
11800.00	91.51	89.72	8675.73	15.53	3220.58	3220.62	0.00	0.00	0.00	0.00	
11900.00	91.51	89.72	8673.09	16.01	3320.55	3320.58	0.00	0.00	0.00	0.00	
12000.00	91.51	89.72	8670.45	16.50	3420.51	3420.55	0.00	0.00	0.00	0.00	
12100.00	91.51	89.72	8667.81	16.98	3520.47	3520.51	0.00	0.00	0.00	0.00	
12200.00	91.51	89.72	8665.16	17.46	3620.44	3620.48	0.00	0.00	0.00	0.00	
12300.00	91.51	89.72	8662.52	17.94	3720.40	3720.44	0.00	0.00	0.00	0.00	
12400.00	91.51	89.72	8659.88	18.43	3820.37	3820.41	0.00	0.00	0.00	0.00	
12500.00	91.51	89.72	8657.24	18.91	3920.33	3920.37	0.00	0.00	0.00	0.00	
12600.00	91.51	89.72	8654.59	19.39	4020.29	4020.34	0.00	0.00	0.00	0.00	
12700.00	91.51	89.72	8651.95	19.87	4120.26	4120.31	0.00	0.00	0.00	0.00	
12800.00	91.51	89.72	8649.31	20.35	4220.22	4220.27	0.00	0.00	0.00	0.00	
12900.00	91.51	89.72	8646.67	20.84	4320.19	4320.24	0.00	0.00	0.00	0.00	
13000.00	91.51	89.72	8644.03	21.32	4420.15	4420.20	0.00	0.00	0.00	0.00	
13100.00	91.51	89.72	8641.38	21.80	4520.11	4520.17	0.00	0.00	0.00	0.00	
13152.39	91.51	89.72	8640.00	22.05	4572.48	4572.53	0.00	0.00	0.00	0.00	PBHL

Targets

Name	Description Dip. Dir.	TVD ft	+N/-S ft	+E/-W ft	Map Northing ft	Map Easting ft	<--- Latitude ---> Deg Min Sec			<--- Longitude ---> Deg Min Sec		
PBHL		8640.00	22.05	4572.48	741946.85	698822.48	33	2	18.763 N	103	49	9.942 W

Formations

MD ft	TVD ft	Formations	Lithology	Dip Angle deg	Dip Direction deg
8674.38	8640.00	Lower Abo Dolomite		0.00	0.00
8967.98	8750.00	Wolfcamp LS		0.00	0.00

Weatherford International, Inc.

Proposal Plan Report

**Weatherford**

Company: Cimarex
Field: Chaves Co., NM (NAD 83)
Site: San Jacinto 4 Federal Com #4
Well: #4
Wellpath: 1

Date: 10/15/2008 **Time:** 11:20:56 **Page:** 3
Co-ordinate(NE) Reference: Well: #4, Grid North
Vertical (TVD) Reference: SITE 4454.5
Section (VS) Reference: Well (0.00N,0.00E,89.72Azi)
Survey Calculation Method: Minimum Curvature **Db:** Sybase

Annotation

MD ft	TVD ft	
8350.00	8350.00	KOP
8989.11	8750.00	LP
13152.38	8640.00	PBHL

Casing Points

MD	TVD	Diameter	Hole Size	Name

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

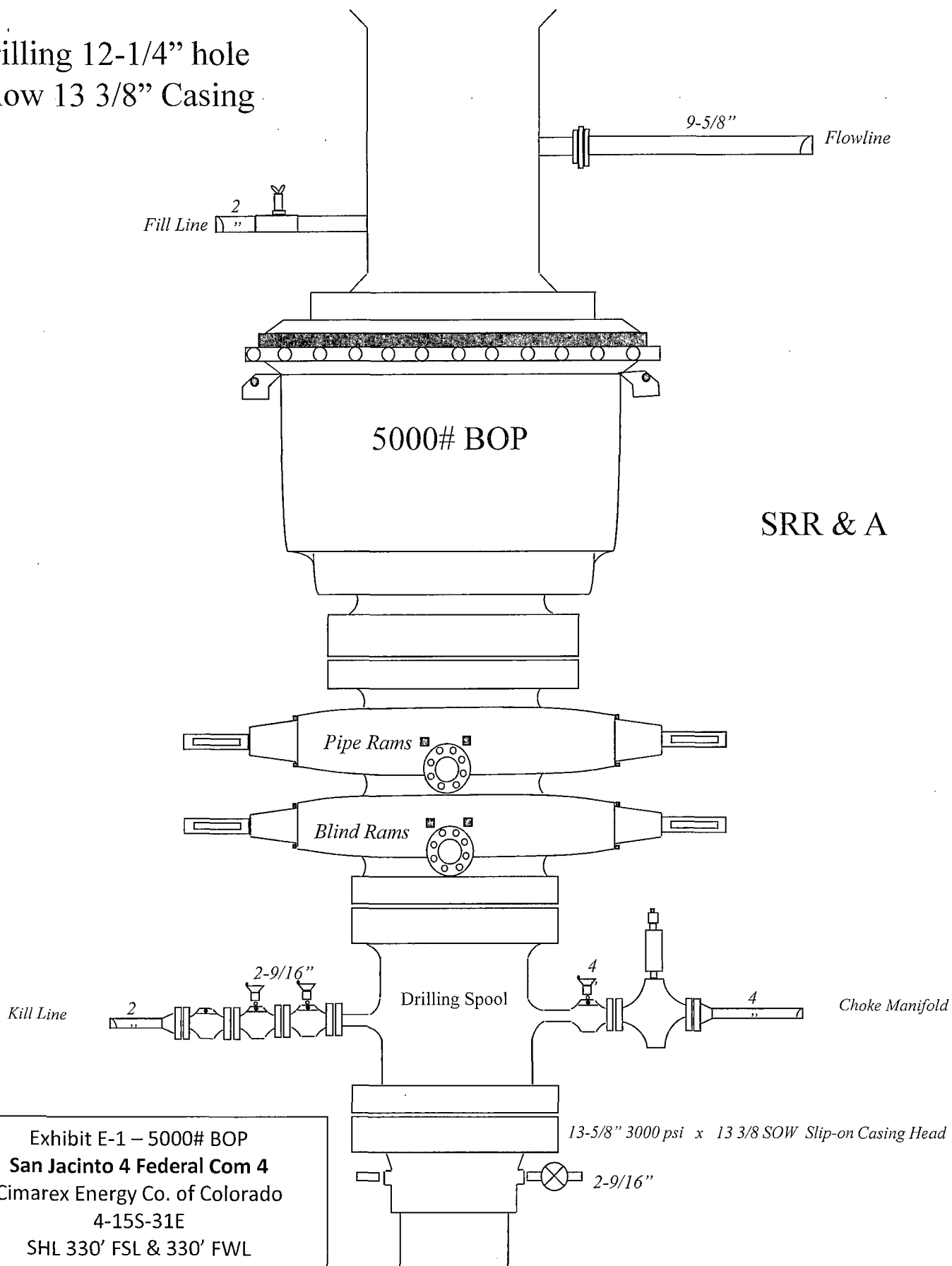
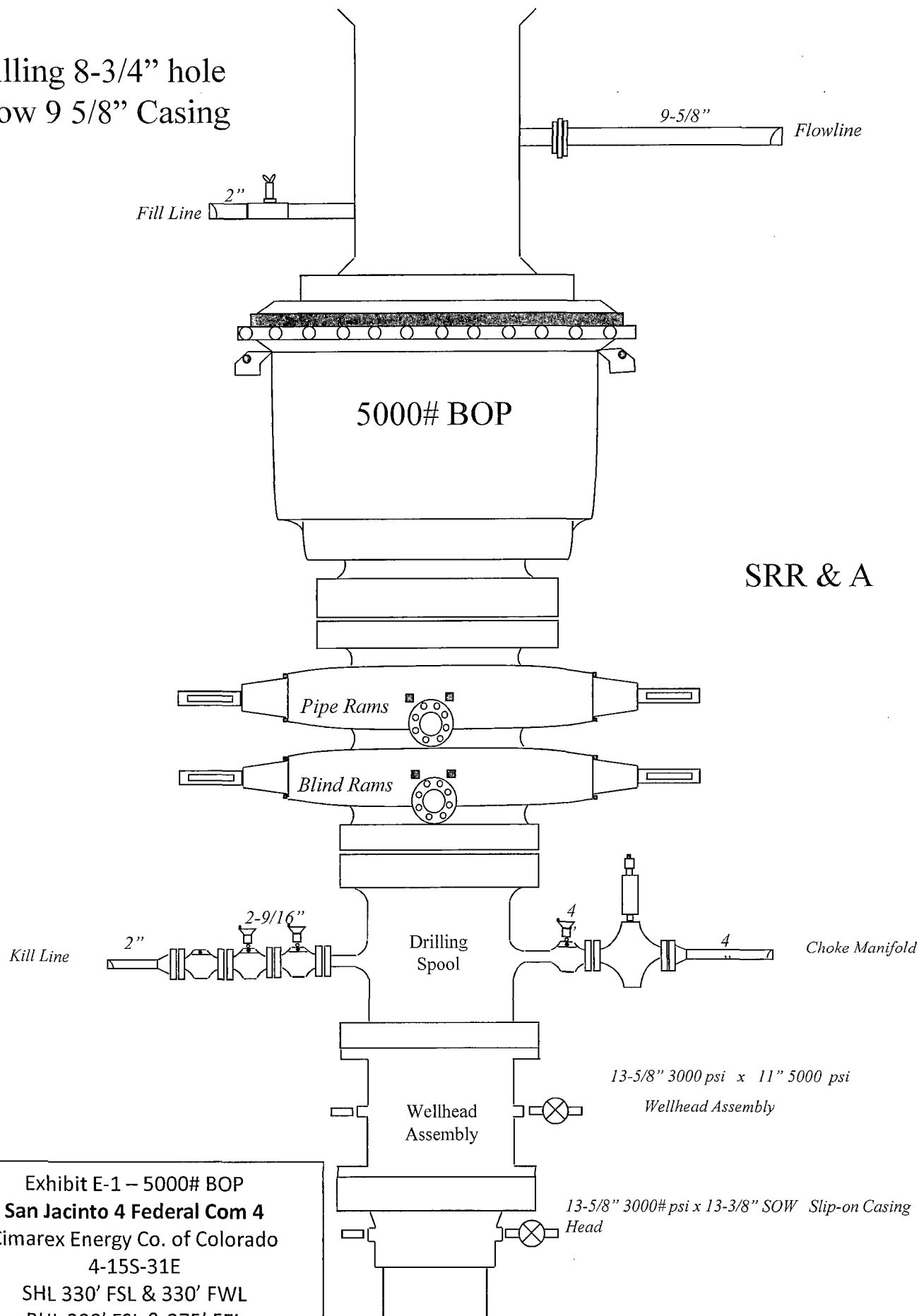


Exhibit E-1 – 5000# BOP
San Jacinto 4 Federal Com 4
Cimarex Energy Co. of Colorado
4-15S-31E
SHL 330' FSL & 330' FWL
BHL 330' FSL & 375' FEL
Chaves County, NM

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



SRR & A

Exhibit E-1 – 5000# BOP
San Jacinto 4 Federal Com 4
Cimarex Energy Co. of Colorado
4-15S-31E
SHL 330' FSL & 330' FWL
BHL 330' FSL & 375' FEL
Chaves County, NM

Chaves County, NM

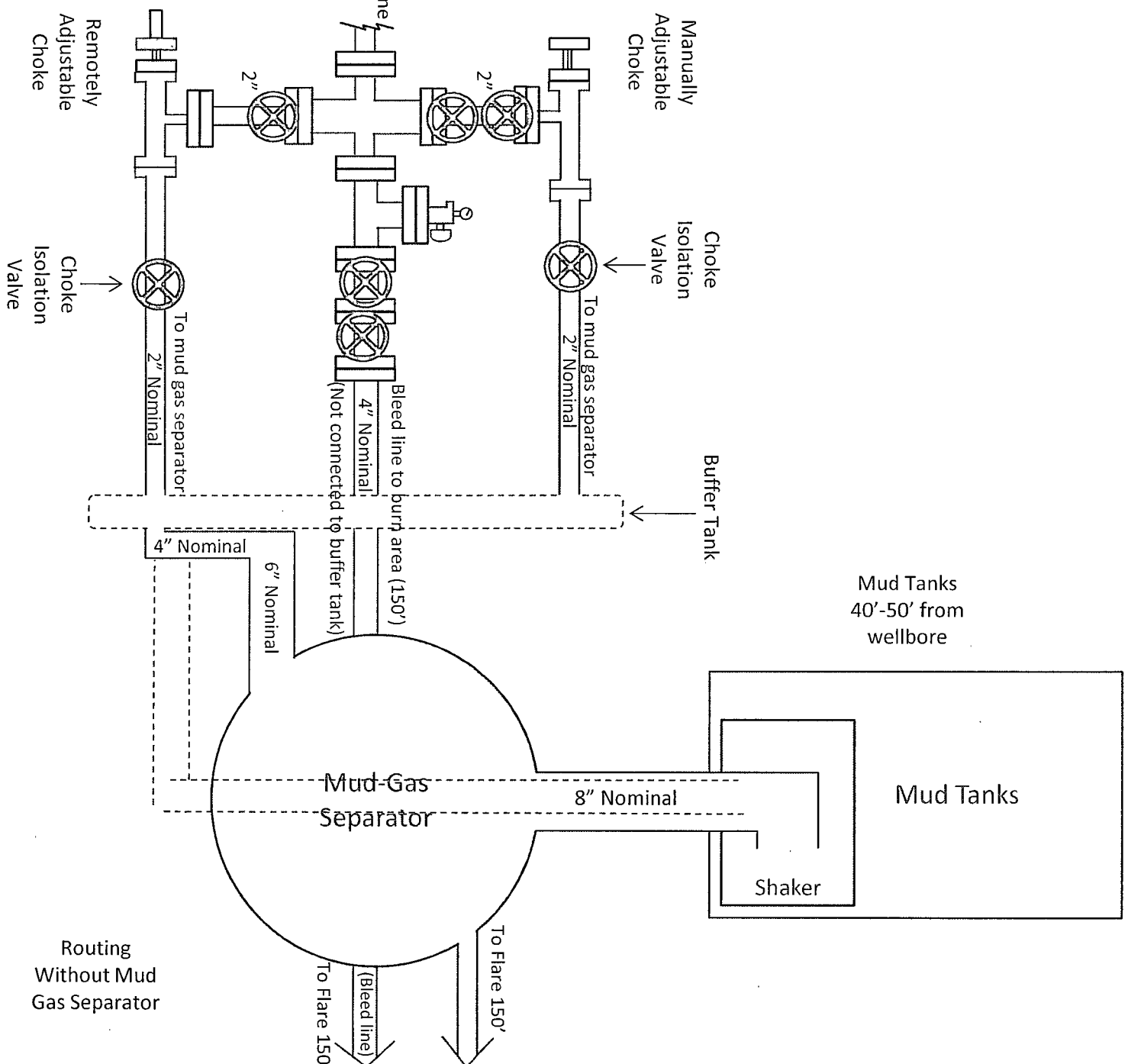


Exhibit F – Co-Flex Hose
San Jacinto 4 Federal Com 4
Cimarex Energy Co. of Colorado
4-15S-31E
SHL 330' FSL & 330' FWL
BHL 330' FSL & 375' FEL
Chaves County, NM

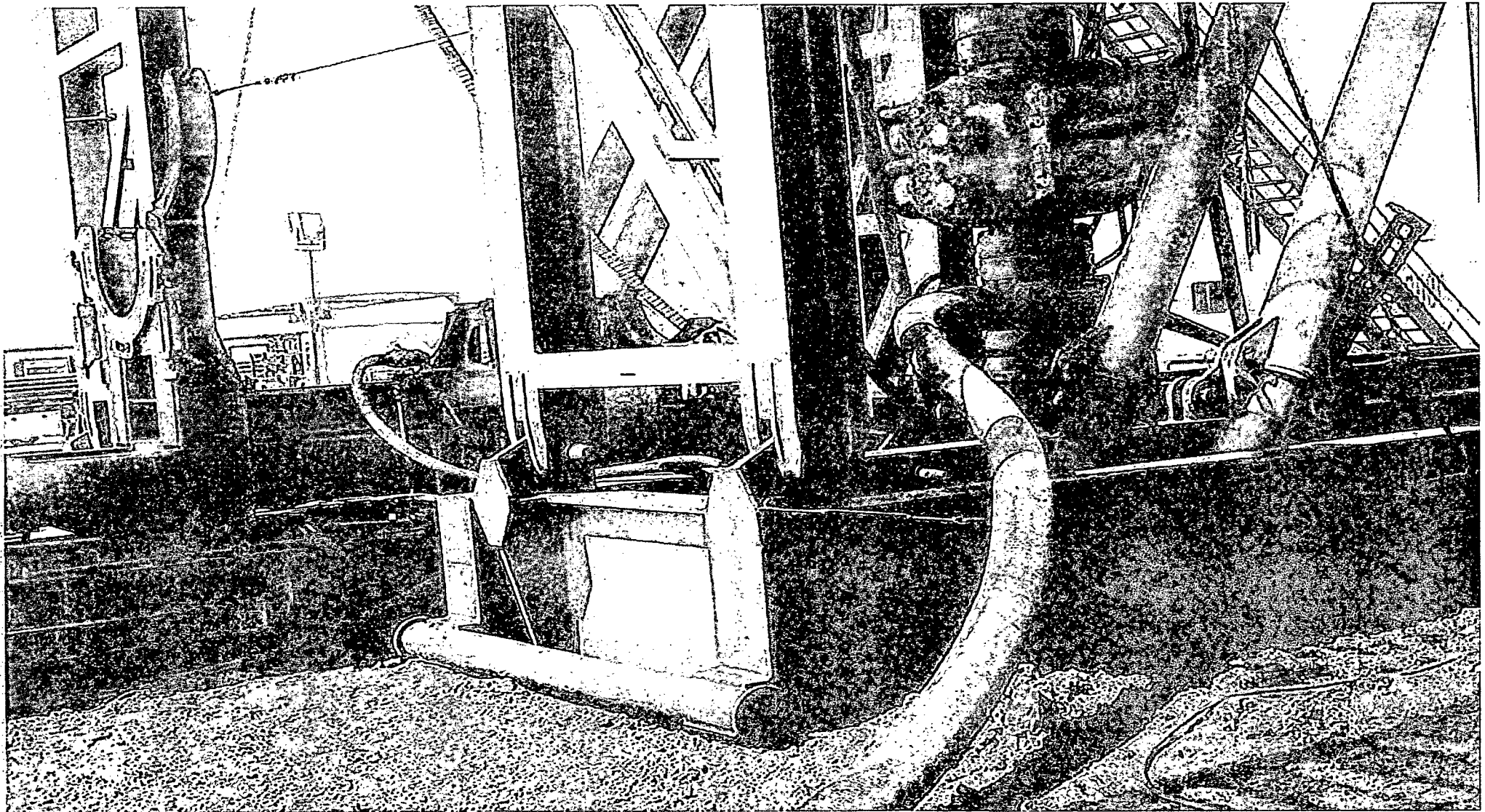


Exhibit F-1 – Co-Flex Hose Hydrostatic Test

San Jacinto 4 Federal Com 4
Cimarex Energy Co. of Colorado
4-15S-31E

SHL 330' FSL & 330' FWL
BHL 330' FSL & 375' FEL
Chaves 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		
<u>Hose assembly pressure tested with water at ambient temperature:</u>		
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: <i>A. Jaime Jimenez</i>	Approved: <i>Levi H. [Signature]</i>

San Jacinto 4 Federal Com 4

Cimarex Energy Co. of Colorado

4-15S-31E

SHL 330' FSL & 330' FWL

BHL 330' FSL & 375' FEL

Chaves County, NM

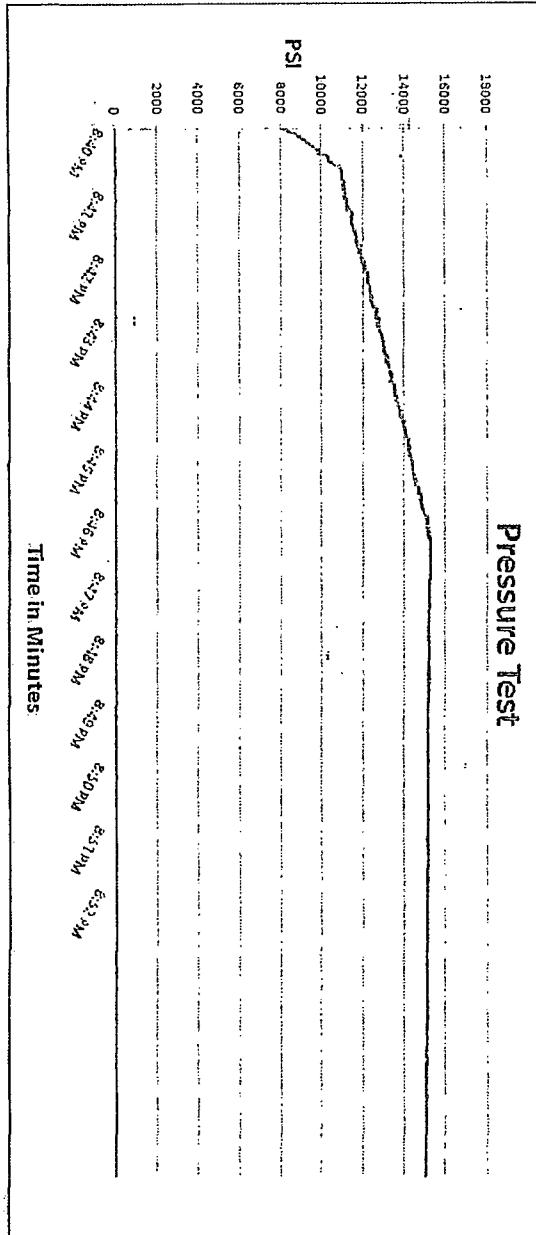
Midwest Hose
& Specialty, Inc.

Customer: Houston

Internal Hydrostatic Test Graph

Pick Ticket #: 94260

Hose Specifications		Verification	
Hose Type	C&K	Length	45'
I.D.	4"	O.D.	6.09"
Working Pressure	10000 PSI	Burst Pressure	Sanitary Safety Multiplier Applied
		Type of Fittings	41/16 JIC
		Die Size	6.30"
		Hose Serial #	5544
		Coupling Method	Swage
		Final O.D.	6.25"
		Hose Assembly Serial #	79793

Test Pressure
15000 PSITime 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: Zac McConnell

Approved By: Kim Thomas

March 3, 2011.

SHL 330' FSL & 330' FWL
BHL 330' FSL & 375' FEL
Chaves County, NM



Midwest Hose & Specialty, Inc.

Customer:	DEM	PO	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:	
<i>Samuel Garcia</i>		3/8/2011	



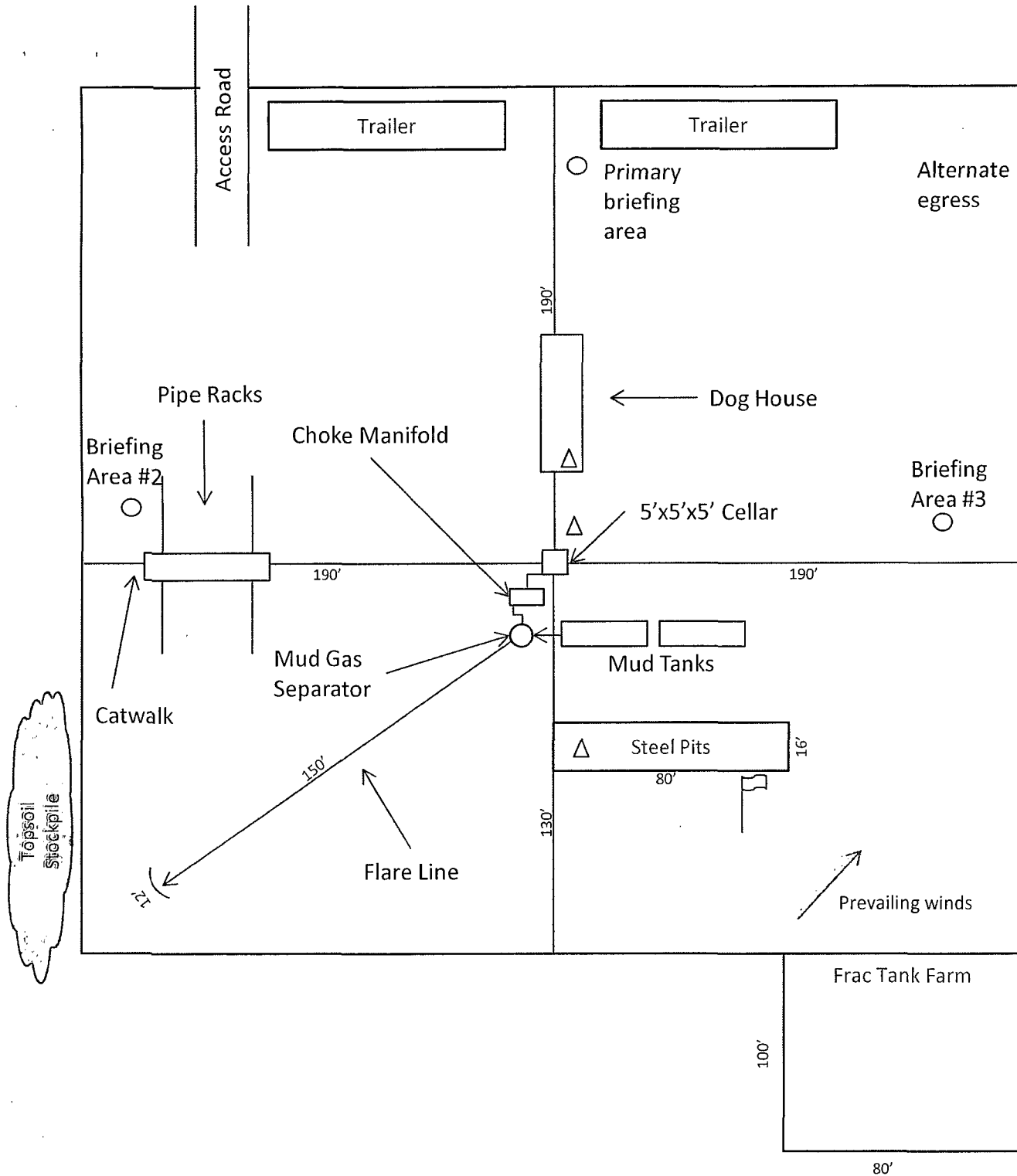
Midwest Hose
& Specialty, Inc.

Exhibit F -3- Co-Flex Hose
San Jacinto 4 Federal Com 4
Cimarex Energy Co. of Colorado
4-15S-31E
SHL 330' FSL & 330' FWL
BHL 330' FSL & 375' FEL
Chaves 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 Layout
San Jacinto 4 Federal Com 4
 Cimarex Energy Co. of Colorado
 4-15S-31E
 SHL 330' FSL & 330' FWL
 BHL 330' FSL & 375' FEL
 Chaves County, NM