

ATS-11-133

DYE TRACE REQUIRED
SEE C.O.A. **OCD Artesia**

Form 3160-3
(April 2004)FORM APPROVED
OMB No. 1004-0137
Expires March 31, 2007

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. NM-116016, State Lease V0-6143-0001	
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. Pending	
3a. Address 600 N. Marienfeld St., Ste. 600; Midland, TX 79701		8. Lease Name and Well No. Airpark 35 Federal Com No. 2 #	
3b. Phone No. (include area code) 432-571-7800		9. API Well No. 30-015- 38996	
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At Surface <u>35-24S-25E</u> - 1560 FSL & 1847 FWL At proposed prod. Zone <u>2-25S-25E</u> - 2310 FNL & 2250 FWL		10. Field and Pool, or Exploratory Bone Spring Wildcat	
14. Distance in miles and direction from nearest town or post office* UNORTHODOX LOCATION		11. Sec., T. R. M. or Blk. and Survey or Area SHL 35-24S-25E BHL 2-25S-25E	
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line if any) 240		12. County or Parish Eddy	
16. No of acres in lease V0-6143-0001 - 320.56 NM-116016 - 160 acres		13. State NM	
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. N/A		17. Spacing Unit dedicated to this well W2W2 160.1 acres	
19. Proposed Depth MD 11230, TVD 7465		20. BLM/BIA Bond No. on File NM-2575	
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3605' GR		22. Approximate date work will start* 02.28.11	
23. Estimated duration 25-35 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 <u>Zeno Farris</u>		Name (Printed/Typed) Zeno Farris		Date 12.28.10	
Title Manager Operations Administration					
Approved By (Signature) <u>/s/ Don Peterson</u>		Name (Printed/Typed)		Date APR 14 2011	
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.

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.

* (Instructions on page 2)

Carlsbad Controlled Water Basin

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

Approval Subject to General Requirements
& Special Stipulations Attached



RECEIVED
APR 15 2011
NMOCD ARTESIA

Application to Drill
Airpark 35 Federal Com No. 2
Cimarex Energy Co. of Colorado
Unit K, Section 35
T24S-R25E, Eddy County, NM

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

1. Location: SHL 35-24S-25E - 1560 FSL & 1847 FWL
BHL 2-25S-25E - 2310 FNL & 2250 FWL
2. Elevation above sea level: 3605' 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: MD 11230, TVD 7465

6. Estimated tops of geological markers:

<u>Rustler</u>	<u>Spotty/NA</u>		
Top Salt	935	Bone Spring "A" Shale	5233
Base Salt	1254	Bone Spring "C" Shale	5612
Delaware	1494	1st Bone Spring Ss	6086
Cherry Canyon	2445	2nd Bone Spring Ss	6625
Brushy Canyon	4099	2nd BS Ss Lower	7402
Brushy Canyon Lower	4798	3rd Bone Spr Carb "C"	7590
Bone Spring	5114		

7. Possible mineral bearing formations:

Bone Spring	Oil
Delaware	Oil

8. Proposed drilling Plan

Drill 8¾" hole to kick off point @ 7179, then drill through curve to lateral TD 11230 MD, 7465 TVD. Run cemented 5½" production casing from 0-11230.

Application to Drill
 Airpark 35 Federal Corn No. 2
 Cimarex Energy Co. of Colorado
 Unit K, Section 35
 T24S-R25E, Eddy County, NM

9. Mud Circulating System:

Depth	Mud Wt	Visc	Fluid Loss	Type Mud
0' to 320'	8.4 - 8.8	30-32	NC	FW spud mud. Add FW to control weight & viscosity and paper to prevent seepage.
320' to 1,469'	9.8 - 10.0	28-29	NC	Saturated Brine. Sweep as needed to clean hole.
1,469' to 11,230'	9.0 - 9.0	28-30	NC	Cut brine. Sweep as needed to clean hole.

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.

10. Casing Program:

	Hole Size	Depth	Casing OD	Weight	Collar	Grade
Surface	17 1/2"	0' to 320'	New 13 1/2"	48#	STC	H-40
Intermediate	12 1/4"	0' to 1469'	New 9 1/2"	36#	LTC	J-55
Production	8 1/2"	0' to 11230'	New 5 1/2"	17#	LTC	P-110

11. Cementing Program:

Surface	360 SKS Halcem C + 4% Bentomlte + 2% CaCl 14.2ppg 1.34 yield 100% Excess TOC Surface
Intermediate	Lead: 355 SKS EconoCem + 5% salt + 5 lbm gilsonite 14.6ppg 1.54 yield 70% Excess Tail: 195 SKS HalCem + 1% CaCl 14.8ppg 1.34 yield 25% Excess TOC Surface
Production	Lead: 1085 SKS EconoCem - H + 0.2 % HR-601 2.44 11.9ppg 2.44 yield 50% Excess Tail: 1150 SKS Versacem - H + 0.5% Halad(R)-344 + 0.4% CFR-3 + 1 lbm/sk salt + 0.1% HR-601 14.5ppg 1.22 yield 25% Excess TOC Surface 13 3/8"

Fresh water zones will be protected by setting 9 1/2" casing at 320 and cementing to surface. Hydrocarbon zones will be protected by setting 9 1/2" casing at 1469 and 5 1/2" at 11230 and cementing to surface.

<u>Collapse Factor</u>	<u>Burst Factor</u>	<u>Tension Factor</u>
1.125	1.125	1.6

Application to Drill
Airpark 35 Federal Com No. 2
Cimarex Energy Co. of Colorado
Unit K, Section 35
T24S-R25E, Eddy County, NM

12. Pressure control Equipment:

Exhibit "E". A 13 $\frac{3}{8}$ " 5000 PSI working pressure BOP psi 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 nipped up 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. From the base of the surface pipe through the running of production casing, the well will be equipped with a 5000 psi BOP system.

BOPS will be tested by an independent service company to 250 psi low and 5000 psi high. Hydril will be tested to 250 psi low and 3000 psi high.

Cimarex Energy Co. of Colorado (operator) requests a variance if Cactus 101 (rig name) is used to drill this well to use a co-flex line between the BOP and choke manifold.

Manufacturer: Midwest Hose & Specialty

Serial Number: 211564 ~~63270~~ See attached htdrostatic test report

Length: 35' Size: 4-1/16" Ends (flanges/clamps)

WP rating: 10,000 psi Anchors required by manufacturer – Yes/No

13. Testing, Logging and Coring Program: *See COA*

- A. Mud logging program: No mud logging program.
- B. Electric logging program: CNL / LDT / CAL / GR, DLL / CAL / GR
- C. No DSTs or cores are planned at this time.

14. Potential Hazards:

No abnormal pressures or temperatures are expected. In accordance with Onshore Order 6, Cimarex has encountered H₂S in a one-time encounter in an Intra-salt Pocket and while drilling and completing wells in the Delaware Mountain Group. In this regard, attached is an H₂S Drilling Operations Plan. The ROEs encountered do not meet the BLM's minimum requirements for the submission of a "Public Protection Plan" for the drilling and completion of this well. 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 **3000 psi** Estimated BHT **115°**

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

Drilling expected to take 25-35 days

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 total depth over possible pay intervals.

Bone Spring pay will be perforated and stimulated.

The proposed well will be tested and potentialied as an oil well.



Cimarex Energy Co.

Eddy County (NM83E)

Sec 35 - T24S - R25E

Airpark 35 Fed Com #2

Wellbore #1

Plan: Plan #1

Standard Planning Report

21 December, 2010



Great White Directional Services

Planning Report

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well Airpark 35 Fed Com #2
Company:	Cimarex Energy Co.	TVD Reference:	WELL @ 0.0usft (Original Well Elev)
Project:	Eddy County (NM83E)	MD Reference:	WELL @ 0.0usft (Original Well Elev)
Site:	Sec 35 - T24S - R25E	North Reference:	Grid
Well:	Airpark 35 Fed Com #2	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1		

Project	Eddy County (NM83E)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site	Sec 35 - T24S - R25E		
Site Position:		Northing:	425,850.70 usft
From:	Map	Easting:	530,277.30 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 10' 14.651 N
		Longitude:	104° 22' 8.685 W
		Grid Convergence:	-0.02 °

Well	Airpark 35 Fed Com #2		
Well Position	+N/-S	0.0 usft	Northing:
	+E/-W	0.0 usft	Easting:
Position Uncertainty	0.0 usft	Wellhead Elevation:	
		Latitude:	32° 10' 14.651 N
		Longitude:	104° 22' 8.685 W
		Ground Level:	0.0 usft

Wellbore	Wellbore #1		
Magnetics	Model Name	Sample Date	Declination
			(°)
	IGRF200510	12/21/10	7.99
			Dip Angle
			(°)
			Field Strength
			(nT)
			48,603

Design	Plan #1		
Audit Notes:			
Version:	Phase:	PLAN	Tie On Depth:
			0.0
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W
	(usft)	(usft)	(usft)
	0.0	0.0	0.0
			Direction
			(°)
			174.57

Plan Sections										
Measured	Inclination	Azimuth	Vertical	+N/-S	+E/-W	Dogleg	Build	Turn	TFO	Target
Depth	(°)	(°)	Depth	(usft)	(usft)	Rate	Rate	Rate	(°)	
(usft)			(usft)			(°/100usft)	(°/100usft)	(°/100usft)		
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
7,178.5	0.00	0.00	7,178.5	0.0	0.0	0.00	0.00	0.00	0.00	
7,628.5	90.00	174.57	7,465.0	-285.2	27.1	20.00	20.00	0.00	174.57	
11,230.4	90.00	174.57	7,465.0	-3,870.9	368.0	0.00	0.00	0.00	0.00	Airpark #2 PBHL



Great White Directional Services

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Project:	Eddy County (NM83E)	MD Reference:	WELL @ 0.0usft (Original Well Elev)
Site:	Sec 35 - T24S - R25E	North Reference:	Grid
Well:	Airpark 35 Fed Com #2	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
7,178.5	0.00	0.00	7,178.5	0.0	0.0	0.0	0.00	0.00	0.00
KOP 20°/100 DLS @ 174.57° AZI									
7,200.0	4.30	174.57	7,200.0	-0.8	0.1	0.8	20.00	20.00	0.00
7,225.0	9.30	174.57	7,224.8	-3.7	0.4	3.8	20.00	20.00	0.00
7,250.0	14.30	174.57	7,249.3	-8.8	0.8	8.9	20.00	20.00	0.00
7,275.0	19.30	174.57	7,273.2	-16.0	1.5	16.1	20.00	20.00	0.00
7,300.0	24.30	174.57	7,296.4	-25.3	2.4	25.4	20.00	20.00	0.00
7,325.0	29.30	174.57	7,318.7	-36.5	3.5	36.6	20.00	20.00	0.00
7,350.0	34.30	174.57	7,339.9	-49.6	4.7	49.8	20.00	20.00	0.00
7,375.0	39.30	174.57	7,360.0	-64.5	6.1	64.8	20.00	20.00	0.00
7,400.0	44.30	174.57	7,378.6	-81.1	7.7	81.4	20.00	20.00	0.00
7,425.0	49.30	174.57	7,395.7	-99.2	9.4	99.7	20.00	20.00	0.00
7,450.0	54.30	174.57	7,411.1	-118.8	11.3	119.3	20.00	20.00	0.00
7,475.0	59.30	174.57	7,424.8	-139.6	13.3	140.2	20.00	20.00	0.00
7,500.0	64.30	174.57	7,436.6	-161.5	15.4	162.2	20.00	20.00	0.00
7,525.0	69.30	174.57	7,446.5	-184.4	17.5	185.2	20.00	20.00	0.00
7,550.0	74.30	174.57	7,454.3	-208.0	19.8	209.0	20.00	20.00	0.00
7,575.0	79.30	174.57	7,460.0	-232.2	22.1	233.3	20.00	20.00	0.00
7,600.0	84.30	174.57	7,463.6	-256.9	24.4	258.0	20.00	20.00	0.00
7,625.0	89.30	174.57	7,465.0	-281.7	26.8	283.0	20.00	20.00	0.00
7,628.5	90.00	174.57	7,465.0	-285.2	27.1	286.5	20.00	20.00	0.00
EOC - Hold to TD									
7,700.0	90.00	174.57	7,465.0	-356.4	33.9	358.0	0.00	0.00	0.00
7,800.0	90.00	174.57	7,465.0	-455.9	43.3	458.0	0.00	0.00	0.00
7,900.0	90.00	174.57	7,465.0	-555.5	52.8	558.0	0.00	0.00	0.00
8,000.0	90.00	174.57	7,465.0	-655.0	62.3	658.0	0.00	0.00	0.00
8,100.0	90.00	174.57	7,465.0	-754.6	71.7	758.0	0.00	0.00	0.00
8,200.0	90.00	174.57	7,465.0	-854.1	81.2	858.0	0.00	0.00	0.00
8,300.0	90.00	174.57	7,465.0	-953.7	90.7	958.0	0.00	0.00	0.00
8,400.0	90.00	174.57	7,465.0	-1,053.2	100.1	1,058.0	0.00	0.00	0.00
8,500.0	90.00	174.57	7,465.0	-1,152.8	109.6	1,158.0	0.00	0.00	0.00
8,600.0	90.00	174.57	7,465.0	-1,252.3	119.0	1,258.0	0.00	0.00	0.00
8,700.0	90.00	174.57	7,465.0	-1,351.9	128.5	1,358.0	0.00	0.00	0.00
8,800.0	90.00	174.57	7,465.0	-1,451.4	138.0	1,458.0	0.00	0.00	0.00
8,900.0	90.00	174.57	7,465.0	-1,551.0	147.4	1,558.0	0.00	0.00	0.00
9,000.0	90.00	174.57	7,465.0	-1,650.5	156.9	1,658.0	0.00	0.00	0.00
9,100.0	90.00	174.57	7,465.0	-1,750.1	166.4	1,758.0	0.00	0.00	0.00
9,200.0	90.00	174.57	7,465.0	-1,849.6	175.8	1,858.0	0.00	0.00	0.00
9,300.0	90.00	174.57	7,465.0	-1,949.2	185.3	1,958.0	0.00	0.00	0.00
9,400.0	90.00	174.57	7,465.0	-2,048.7	194.7	2,058.0	0.00	0.00	0.00
9,500.0	90.00	174.57	7,465.0	-2,148.3	204.2	2,158.0	0.00	0.00	0.00
9,600.0	90.00	174.57	7,465.0	-2,247.8	213.7	2,258.0	0.00	0.00	0.00
9,700.0	90.00	174.57	7,465.0	-2,347.4	223.1	2,358.0	0.00	0.00	0.00
9,800.0	90.00	174.57	7,465.0	-2,446.9	232.6	2,458.0	0.00	0.00	0.00
9,900.0	90.00	174.57	7,465.0	-2,546.5	242.1	2,558.0	0.00	0.00	0.00
10,000.0	90.00	174.57	7,465.0	-2,646.1	251.5	2,658.0	0.00	0.00	0.00
10,100.0	90.00	174.57	7,465.0	-2,745.6	261.0	2,758.0	0.00	0.00	0.00
10,200.0	90.00	174.57	7,465.0	-2,845.2	270.4	2,858.0	0.00	0.00	0.00
10,300.0	90.00	174.57	7,465.0	-2,944.7	279.9	2,958.0	0.00	0.00	0.00
10,400.0	90.00	174.57	7,465.0	-3,044.3	289.4	3,058.0	0.00	0.00	0.00
10,500.0	90.00	174.57	7,465.0	-3,143.8	298.8	3,158.0	0.00	0.00	0.00
10,600.0	90.00	174.57	7,465.0	-3,243.4	308.3	3,258.0	0.00	0.00	0.00
10,700.0	90.00	174.57	7,465.0	-3,342.9	317.8	3,358.0	0.00	0.00	0.00
10,800.0	90.00	174.57	7,465.0	-3,442.5	327.2	3,458.0	0.00	0.00	0.00



Great White Directional Services

Planning Report

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Site:	Sec 35 - T24S - R25E	North Reference:	Grid
Well:	Airpark 35 Fed Corn #2	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
10,900.0	90.00	174.57	7,465.0	-3,542.0	336.7	3,558.0	0.00	0.00	0.00	
11,000.0	90.00	174.57	7,465.0	-3,641.6	346.2	3,658.0	0.00	0.00	0.00	
11,100.0	90.00	174.57	7,465.0	-3,741.1	355.6	3,758.0	0.00	0.00	0.00	
11,200.0	90.00	174.57	7,465.0	-3,840.7	365.1	3,858.0	0.00	0.00	0.00	
11,230.4	90.00	174.57	7,465.0	-3,870.9	368.0	3,888.3	0.00	0.00	0.00	
TD at 11230.4 - Airpark #2 PBHL										

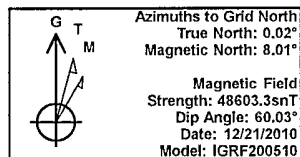
Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
- hit/miss target										
- Shape										
Airpark #2 PBHL	0.00	0.00	7,465.0	-3,870.9	368.2	421,979.84	530,645.53	32° 9' 36.346 N	104° 22' 4.386 W	
- plan misses target center by 0.3usft at 11230.4usft MD (7465.0 TVD, -3870.9 N, 368.0 E)										
- Point										

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
7,178.5	7,178.5	0.0	0.0	KOP 20°/100 DLS @ 174.57° AZI	
7,628.5	7,465.0	-285.2	27.1	EOC - Hold to TD	
11,230.4	7,465.0	-3,870.9	368.0	TD at 11230.4	



Cimarex Energy Co.
Project: Eddy County (NM83E)
Site: Sec 35 - T24S - R25E
Well: Airpark 35 Fed Com #2
Wellbore: Wellbore #1

WELL DETAILS: Airpark 35 Fed Com #2						
+N/-S	+E/-W	Northing	Ground Level:	0.0	Latitude	Longitude
0.0	0.0	425850.70	Easting	530277.30	32° 10' 14.651 N	104° 22' 8.685 W
SHL: 1560' FSL / 1847' FWL						
BHL: 2310' FNL / 2250' FWL						

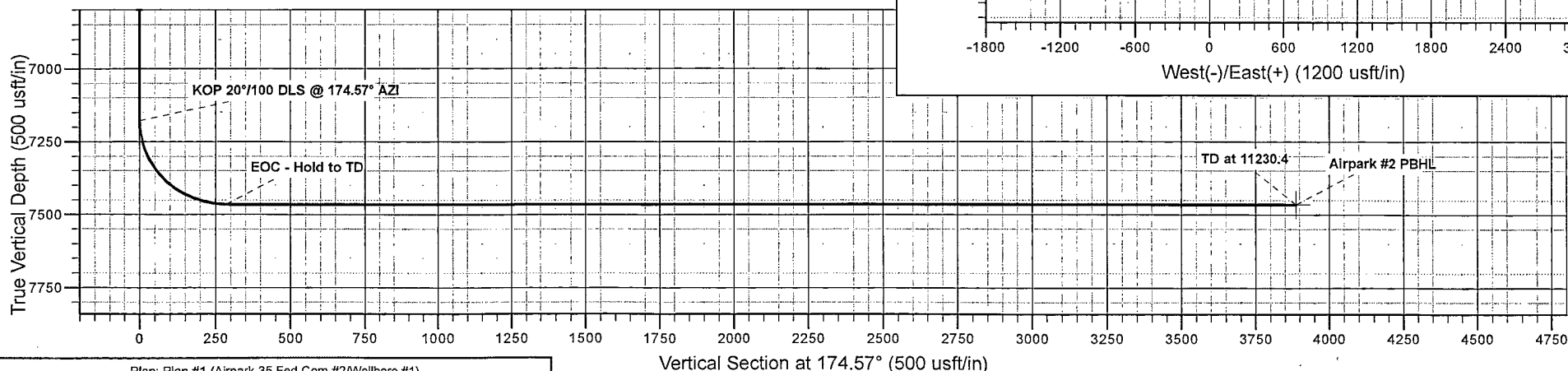
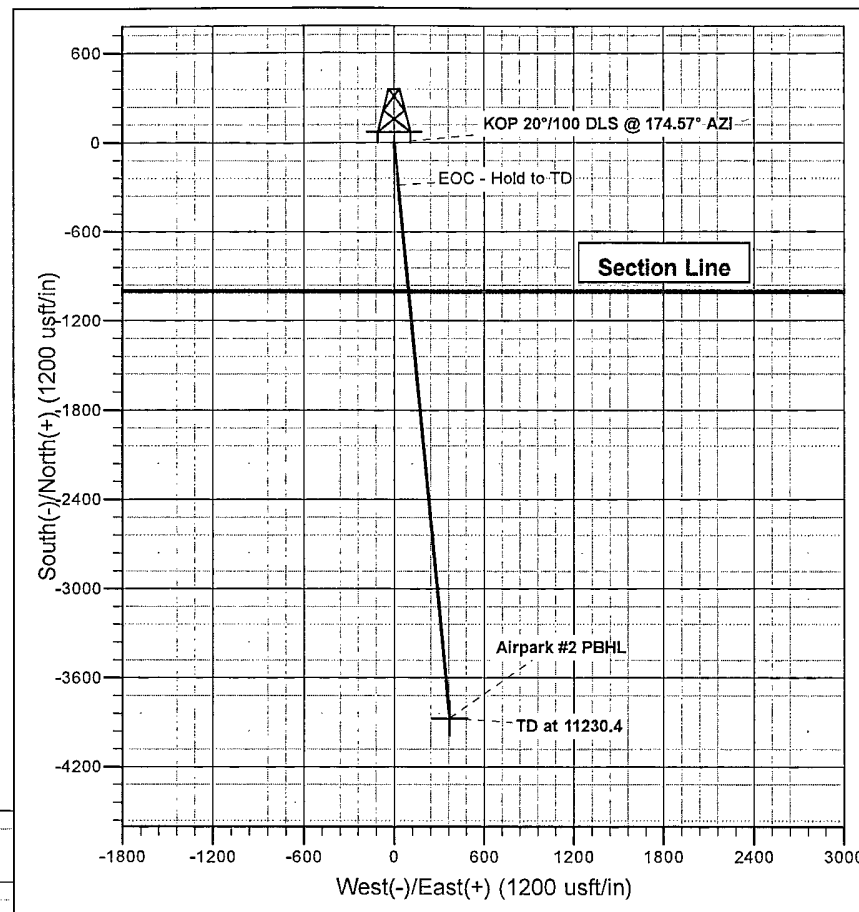


WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude
Airpark #2 PBHL	7465.0	-3870.9	368.2	32° 9' 36.346 N	104° 22' 4.386 W

SECTION DETAILS

TVD	MD	Inc	Azi	+N/-S	+E/-W	VSe	Departure	Annotation
7178.5	7178.5	0.00	0.00	0.0	0.0	0.0	0.0	KOP 20°/100 DLS @ 174.57° AZI
7465.0	7628.5	90.00	174.57	-285.2	27.1	286.5	286.5	EOC - Hold to TD
7465.0	11230.4	90.00	174.57	-3870.9	368.0	3888.3	3888.3	TD at 11230.4



Plan: Plan #1 (Airpark 35 Fed Com #2/Wellbore #1)

Created By: Aaron Pullin

Date: 10:01, December 21 2010

SR & A

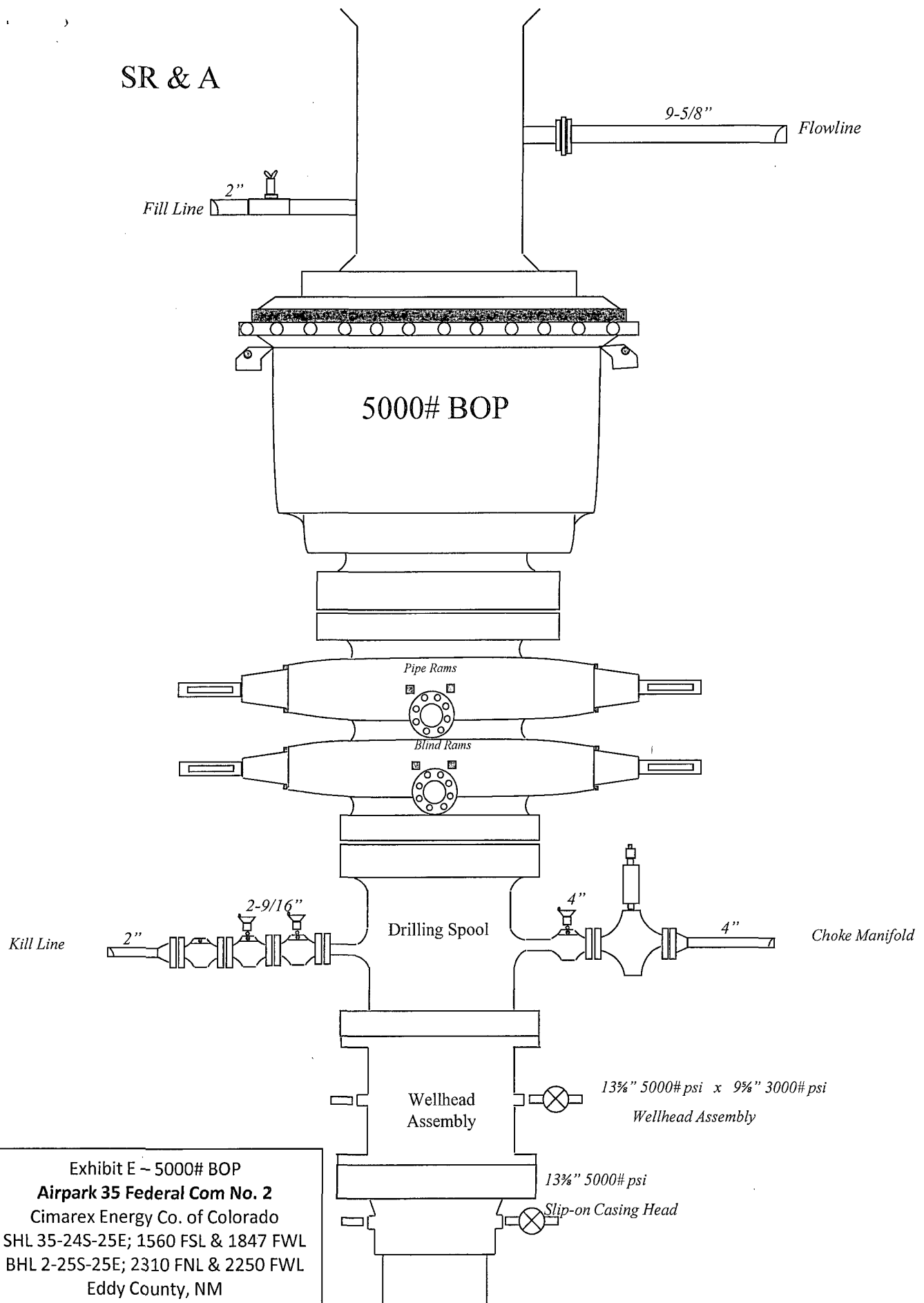


Exhibit E ~ 5000# BOP

Airpark 35 Federal Com No. 2

Cimarex Energy Co. of Colorado

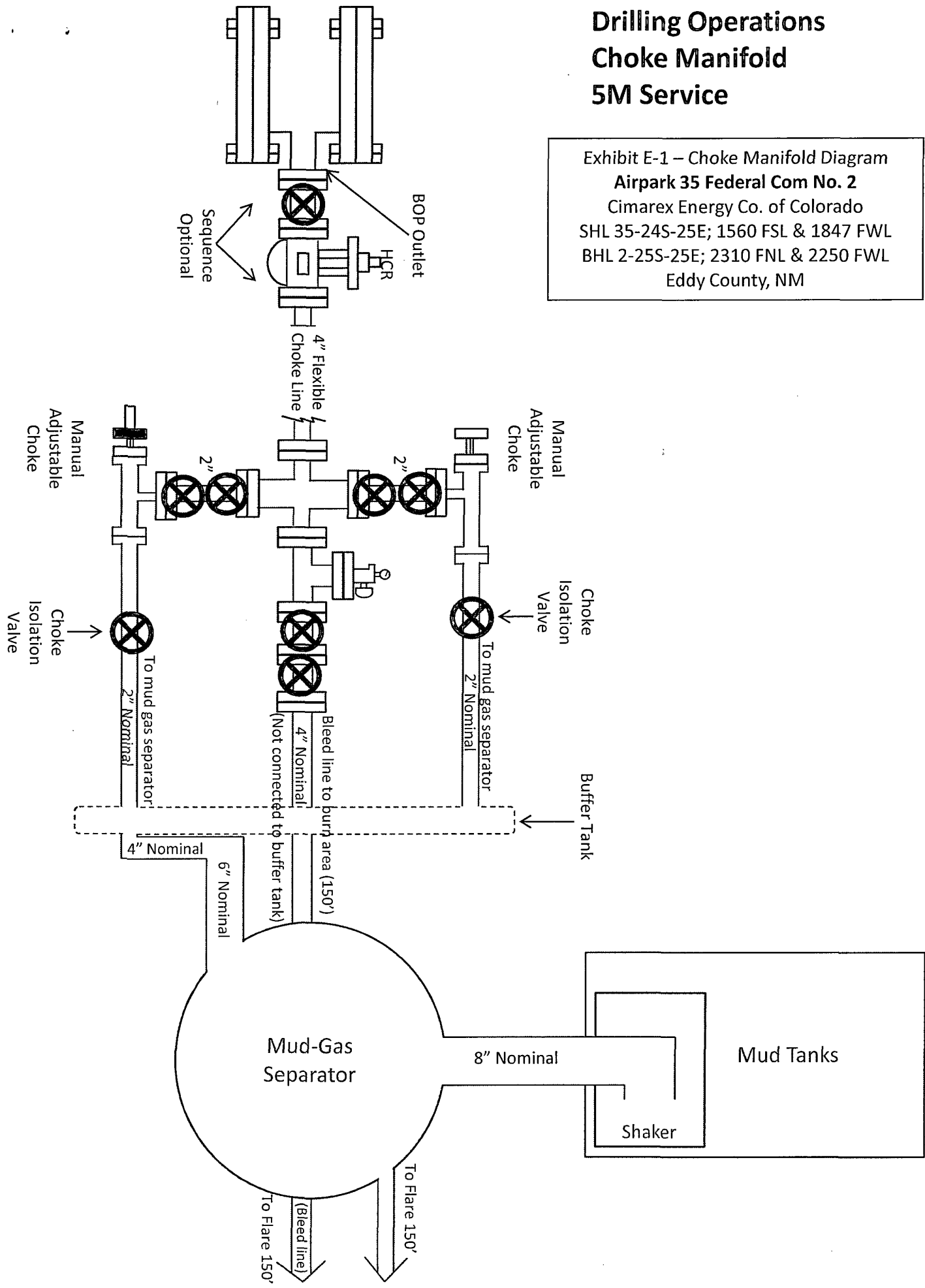
SHL 35-24S-25E; 1560 FSL & 1847 FWL

BHL 2-25S-25E; 2310 FNL & 2250 FWL

Eddy County, NM

Drilling Operations
Choke Manifold
5M Service

Exhibit E-1 – Choke Manifold Diagram
Airpark 35 Federal Com No. 2
Cimarex Energy Co. of Colorado
SHL 35-24S-25E; 1560 FSL & 1847 FWL
BHL 2-25S-25E; 2310 FNL & 2250 FWL
Eddy County, NM





Midwest Hose
& Specialty, Inc.

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)

M I D W E S T
HOSE AND SPECIALTY INC.

INTERNAL HYDROSTATIC TEST REPORT			
Customer: CACTUS		P.O. Number: Asset#M4812	
HOSE SPECIFICATIONS			
Type: CHOKER LINE		Length: 35'	
I.D. 4" INCHES		O.D. 8" INCHES	
WORKING PRESSURE	TEST PRESSURE		BURST PRESSURE
10,000 PSI	15,000 PSI		PSI
COUPLINGS			
Type of End Fitting 4 1/16 10K FLANGE			
Type of Coupling: SWEDGED		MANUFACTURED BY MIDWEST HOSE & SPECIALTY	
PROCEDURE			
<i>Hose assembly pressure tested with water at ambient temperature.</i>			
TIME HELD AT TEST PRESSURE		ACTUAL BURST PRESSURE:	
15 MIN.		0 PSI	
COMMENTS: s/n#O211964 Hose is covered with stainless steel armour cover and wrapped with fire resistant vermiculite coated fiberglass insulation rated for 1500 degrees complete with lifting eyes			
Date: 6/28/2006	Tested By: BOBBY FINK		Approved: MENDI JACKSON