13-228

Form 3160-3
(March 2012)

OCD Artesia

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No. NM91078 TCS

6. If Indian, Allotee or Tribe Name 2/13/2013

1a. Type of work: ☑ DRILL ☐ REENTER

7. If Unit or CA Agreement, Name and No.

1b. Type of Well: ☑ Oil Well ☐ Gas Well ☐ Other ☑ Single Zone ☐ Multiple Zone

8. Lease Name and Well No. LONGVIEW FEDERAL 12-13H 38647

2. Name of Operator RKI EXPLORATION & PRODUCTION, LLC. 246289

9. API Well No. 30-015-41091

3a. Address 210 PARK AVENUE, SUITE 900
OKLAHOMA CITY, OK. 73102

3b. Phone No. *(include area code)* 405-996-5748 (BRENT UMBERHAM)

10. Field and Pool, or Exploratory ~~UNDESIGNATED~~ BONE SPRING

Corbin; Bone Spring, S.

4. Location of Well *(Report location clearly and in accordance with any State requirements.*)*
At surface 925 FNL & 440 FWL, SECTION 12, T. 23 S., R. 28 E.
At proposed prod. zone 330 FNL & 330 FWL, SECTION 1, T. 23 S., R. 28 E.

11. Sec., T. R. M. or Blk. and Survey or Area
BHL: SECTION 1, T. 23 S., R. 28 E.
SHL: SECTION 12, T. 23 S., R. 28 E.

14. Distance in miles and direction from nearest town or post office*
5 MILES NORTHEAST OF LOVING, NM

12. County or Parish EDDY

13. State NM

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) SHL: 440' BHL: 330'

16. No. of acres in lease ~~800~~ 798.88

17. Spacing Unit dedicated to this well ~~200~~ 199.51

18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. SHL: 660' BHL: 100'

19. Proposed Depth
MD: 14,190'
TVD: 8,459

20. BLM/BIA Bond No. on file
NLM-NMB-000460

21. Elevations (Show whether DF, KDB, RT, GL, etc.)
3018.6' GL

22. Approximate date work will start*

23. Estimated duration
25 DAYS

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, must 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 must 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 BLM.

25. Signature Barry W. Hunt — Name *(Printed/Typed)* BARRY W. HUNT — Date 11/27/12

Title
PERMIT AGENT FOR RKI EXPLORATION & PRODUCTION, LLC.

Approved by *(Signature)* /s/ Don Peterson — Name *(Printed/Typed)* /s/ Don Peterson — Date FEB - 7 2013

Title for 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.C. 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

RECEIVED
FEB 11 2013
NMOCD ARTESIA

SEE ATTACHED FOR CONDITIONS OF APPROVAL

Approval Subject to General Requirements & Special Stipulations Attached

DISTRICT I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
DISTRICT II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
DISTRICT IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, New Mexico 87505

Form C-102
Revised August 1, 2011
Submit one copy to appropriate District Office
☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name
30-015-41091	15011	Culebra Bluff; B.S. South ~~UNDESIGNATED~~ BONE SPRING

Property Code	Property Name	Well Number
38684	LONGVIEW FEDERAL 12	13H

OGRID No.	Operator Name	Elevation
246289	RKI EXPLORATION & PRODUCTION	3018.60'

Surface Location

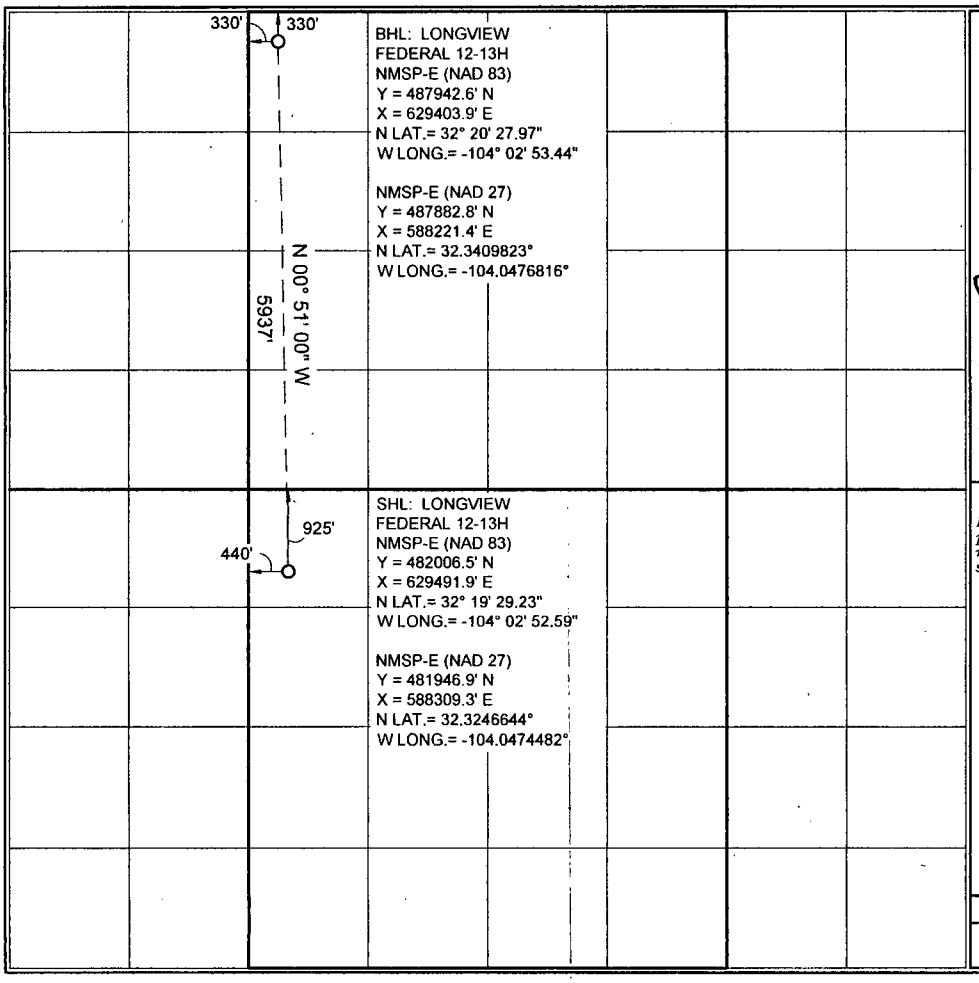
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	12	23 S	28 E		925	NORTH	440	WEST	EDDY

Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
● 4	1	23 S	28 E		330	NORTH	330	WEST	EDDY

Dedicated Acres	Joint or Infill	Consolidated Code	Order No.
199.51			

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.



OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Barry W. Hunt 11/27/12
Signature Date

Barry W. Hunt
Print Name

E-mail Address

SURVEYORS CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

March 20, 2012
Date of Survey

Signature and Seal of Professional Surveyor:

JAMES E. TOMPKINS NEW MEXICO 14729 REGISTERED PROFESSIONAL LAND SURVEYOR

James

Job No.: WTC48404

JAMES E. TOMPKINS 14729
Certificate Number

CERTIFICATION

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access road proposed herein; that I am familiar with the conditions that presently exist; that I have full knowledge of State and Federal laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true and correct, and that the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or RKI Exploration and Production, LLC am responsible for the operations conducted under this application. These statements are subject to the provisions of 18 U. S. C. 1001 for the filing of false statements. Executed this 27th day of November 2012.

Signed: Barry W. Hunt

Printed Name: Barry Hunt
Position: Agent for RKI Exploration & Production, LLC.
Address: 1403 Springs Farm Place, Carlsbad, NM 88220
Telephone: (575) 361-4078
E-mail: specialtpermitting@gmail.com

RKI Exploration & Production LLC
3817 NW Expressway, Suite 950, Oklahoma City, OK 73112
405-949-2221 Fax 405-949-2223

June 25th, 2012

To Whom It May Concern:

Please be advised that Mr. Barry Hunt has been retained by RKI Exploration & Production to sign as our agent on Application for Permit to Drill (APD) as well as Right of Way applications within the States of New Mexico and Texas.

If you have any questions or require additional information, please feel free to contact me at (405) 996-5771.

Sincerely,

Charles K. Ahn

Charles K. Ahn
EH&S/Regulatory Manager

RKI Exploration & Production, LLC

DRILLING PLAN

Well Longview Federal 12-13H
Location Surface: 925 FNL 440 FWL Section 12-23S-28E
Bottom Hole: 330 FNL 330 FWL Section 1-23S-28E

County Eddy
State New Mexico

1) The elevation of the unprepared ground is 3,018.6 feet above sea level.

2) The geologic name of the surface formation is Quaternary - Alluvium.

3) A rotary rig will be utilized to drill the well to 14,190 feet and run casing.
This equipment will then be rigged down and the well will be completed with a workover rig.

4) Proposed depth is: 8,459 feet TVD 14,190 feet MD

5) Estimated tops:

	TVD	MD			
Alluvium	*				
Rustler	203	203			
Salado	245	245			
Top of Salt	512	512			
Base of Salt	2,635	2,635	BHP = .44 psi/ft x depth		
Lamar Lime	2,740	2,740	1,206	psi	
Base of Lime	2,780	2,780	1,223	psi	
Delaware Top **	2,840	2,840	1,250	psi	
Bell Canyon Sand **	2,840	2,840	1,250	psi	
Cherry Canyon Sand **	3,850	3,850	1,694	psi	
Brushy Canyon Sand **	4,815	4,815	2,119	psi	
Bone Spring **	6,400	6,400			
Bone Spring 1st Sand **	7,510	7,510	3,304	psi	
KOP	7,981	7,981			
Bone Spring 2nd Sand **	8,280	8,300	3,643	psi	
Landing Point	8,459	8,731			
TD	8,459	14,190	3,722	psi	180 degree F

* Fresh water is anticipated at approximately 150 feet.
** Hydrocarbon zones

6) Pressure control equipment:

The blowout preventer equipment (BOP) shown in Exhibit #1 will consist of a double ram type (3,000 psi WP) preventer, a bag-type annular preventer (3,000 psi WP), and rotating head. Both units will be hydraulically operated and the ram type preventer will be equiped with blind rams on top and pipe rams (sized to accommodate the drill pipe size being utilized) on bottom. A 13 3/8" SOW x 13 5/8" 5M casing head will be installed on the 13 3/8" casing and utilized until total depth is reached. All BOP and associated equipment will be tested to 3,000 psi and the annular will be tested to 1,500 psi after setting each casing string. The 13 3/8" and 9 5/8" casing wil be tested to .22 psi per ft of casing string length or 1,500 psi whichever is greater, but not to exceed 70% of the minimum yield. 5 1/2" o/ox

BOP test not required after setting prod. casing.

Pipe rams will be operatied and checked each 24 hour period and each time the drill string is out of the hole. These function test will be documented on the daily driller's log.
A drilling spool or blowout preventer with 2 side outlets (choke side shall be 3" minimum diameter, kill side shall be at least 2" diameter).
2 kill line valves, one of which will be a check valve.
2 chokes on the manifold along with a pressure gauge.
Upper kelly cock valve with handle available.
Safety vavle and subs to fit all drill string connections in use.
All BOP equipment connections subjected to pressure will be flanged, welded, or clamped.
Fill up line above the upper most preventer.

7) Casing program: ALL NEW CASING

Hole Size	Top	Bottom	OD Csg	Wt/Grade	Connection	Collapse Design Factor	Burst Design Factor	Tension Design Factor
17 1/2"	0	~~250~~ 200	13 3/8"	54.5#/J-55	ST&C	10.27	49.64	37.72
12 1/2"	0	4,000	9 5/8"	40#/J-55	LT&C	1.15	4.49	3.25
8 3/4"	0	14,190	5 1/2"	17#/HCP-110	LT&C	1.37	1.55	5.00

See COA

Collapse	1.125
Burst	1.0
Tension	2.0

8) Cement program:

Surface 17 1/2" hole
Pipe OD 13 3/8"
Setting Depth ~~250~~ ft
Annular Volume 0.69462 cf/ft
Excess 1 100 %

Lead 122 sx 1.75 cf/sk 13.5 ppg
Tail 100 sx 1.34 cf/sk 14.8 ppg
Lead: "C" + 4% PF20 (gel) + 2% PF1 (CC) + .125 pps PF29 (CelloFlake) + .2% PF46 (antifoam)
Tail: "C" + 1% PF1 (CC)
Top of cement: Surface

Intermediate 12 1/2" hole
Pipe OD 9 5/8"
Setting Depth 4,000 ft
Annular Volume 0.31318 cf/ft 0.3627 cf/ft
Excess 0.5 50 %

Lead 788 sx 2.07 cf/sk 12.6 ppg
Tail 200 sx 1.33 cf/sk 14.8 ppg
Lead: 35/65 Poz "C" + 5% PF44 (salt) + 6% PF20 (gel) + 3 pps PF42 (KoalSeal) + .125 pps PF29 (CelloFlake) + .2% PF46 (antifoam) + 1% PF1 (CC)
Tail: "C" + .2% PF13 (retarder)
Top of cement: Surface

Production 8 3/4" hole
Pipe OD 5 1/2"
Setting Depth 14,190 ft
Annular Volume 0.1733 cf/ft 0.26074 cf/ft 300 ft
Excess 0.35 35 %
DV Tool Depth 5,500 ft
Stage 1

2000
Lead: ~~1,385~~ sx 1.47 cf/sk 13.0 ppg
Lead: PVL + 2% PF174 (expanding agent) + .3% PF167 (Uniflac) + .1% PF65 (dispersant) + .2% PF13 (retarder) + .25 pps PF46 (antifoam)
Top of cement: DV tool

Stage 2
150
Lead: ~~80~~ sx 2.04 cf/sk 12.6 ppg
Tail: 200 sx 1.47 cf/sk 13.0 ppg
Lead: 35/65 Poz "C" + 5% PF44 (salt) + 6% PF20 (gel) + .125 pps PF29 (CelloFlake) + .2% PF13 (retarder) + .25 pps PF46 (antifoam)
Tail: PVL + 1.3% PF44 (salt) + 5% PF174 (expander) +.5% FP606 (gel suppressing agent) + .25 pps PF46 (antifoam) + .2% PF13 (retarder)
Top of cement: 3,700 ft

9) Mud program:

Top	Bottom	Mud Wt.	Vis	PV	YP	Fluid Loss	Type System
0	~~250~~ 200	8.5 to 8.9	32 to 36	1 - 6	1 - 6	NC	Fresh Water
~~250~~	4,000	9.8 to 10.0	28 to 30	1 - 3	1 - 3	NC	Brine
4,000	14,190	8.9 to 9.1	28 to 36	1 - 3	1 - 3	NC	Fresh Water

10) Logging, coring, and testing program: See COA

No drillstem test are planned
KOP to intermediate: CNL, Caliper, GR, DLL,
Intermediate to surface: CNL, GR
No coring is planned

11) Potential harzards:

No abnormal pressure or temperature is expected. No H2S is known to exist in the area.
Lost circulation is not anticipated, but lost circulation equipment will be on location and readily available if needed.

12) Anticpated start date ASAP
Duration 25 days

RKI Exploration & Production

Project: Eddy County (NM83E)
Site: Sec 12-T23S-R28E
Well: Longview Fed 1-13H
Wellbore: Wellbore #1
Design: **Prelim Plan**

T M Azimuths to True North
Magnetic North: 7.65°

Magnetic Field
Strength: 48513.5snT
Dip Angle: 60.16°
Date: 2012/10/26
Model: IGRF2010

Wolverine Directional

WELL DETAILS: **Longview Fed 1-13H**

Ground Level: 0.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.0	0.0	482006.50	629491.90	32° 19' 29.227 N	104° 2' 52.596 W

SHL: 925' FNL / 440' FWL of Sec 12
BHL: 330' FNL / 330' FWL of Sec 1

SECTION DETAILS

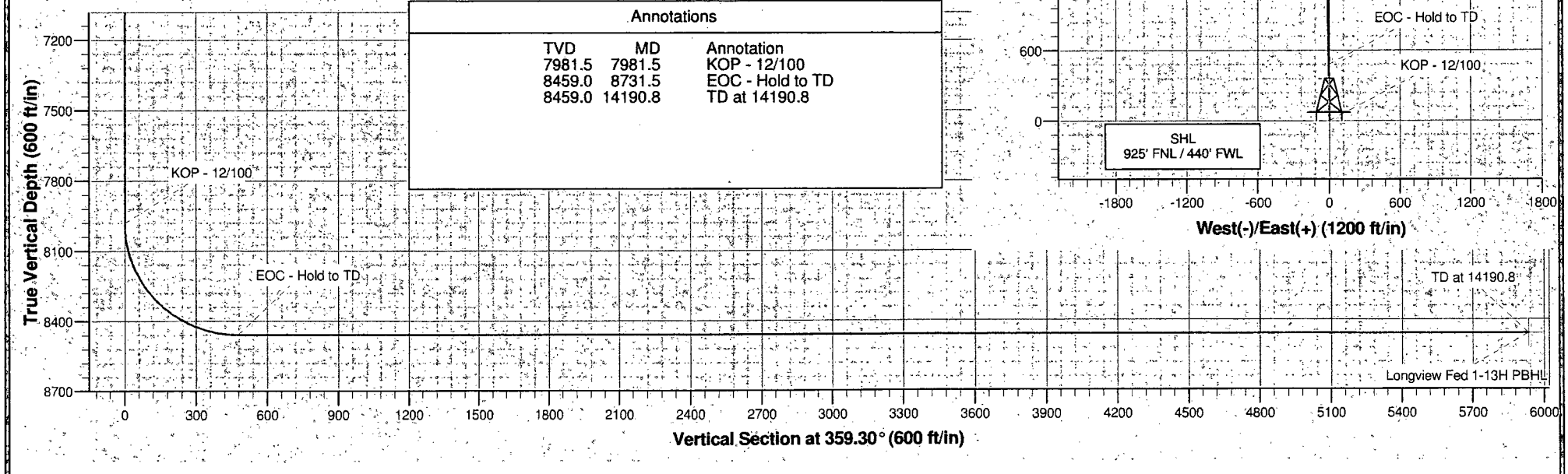
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	7981.5	0.00	0.00	7981.5	0.0	0.0	0.00	0.00	0.0	
3	8731.5	90.00	359.30	8459.0	477.4	-5.8	12.00	359.30	477.5	
4	14190.8	90.00	359.30	8459.0	5936.3	-72.2	0.00	0.00	5936.8	Longview Fed 1-13H PBHL

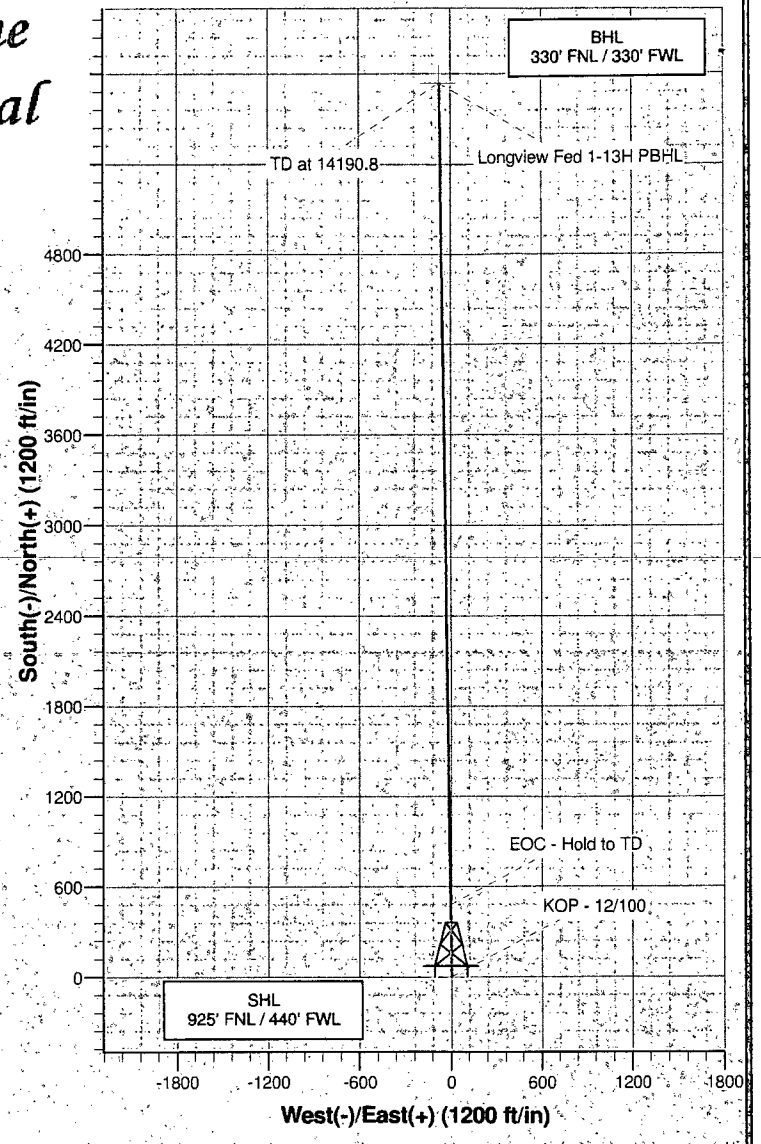
PROJECT TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
Longview Fed 1-13H PBHL	8459.0	5936.3	-72.2	487942.60	629403.90	Point

Annotations

TVD	MD	Annotation
7981.5	7981.5	KOP - 12/100
8459.0	8731.5	EOC - Hold to TD
8459.0	14190.8	TD at 14190.8





RKI Exploration & Production

Eddy County (NM83E)
Sec 12-T23S-R28E
Longview Fed 12-13H

Wellbore #1

Plan: Prelim Plan

Standard Planning Report

26 October, 2012

Wolverine Directional, LLC
Planning Report

Database:	EDM 2003.21 Single User Db	**Local Co-ordinate Reference:**	Well Longview Fed 1-13H
Company:	RKI Exploration & Production	**TVD Reference:**	WELL @ 0.0ft (Original Well Elev)
Project:	Eddy County (NM83E)	**MD Reference:**	WELL @ 0.0ft (Original Well Elev)
Site:	Sec 12-T23S-R28E	**North Reference:**	True
Well:	Longview Fed 1-13H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Prelim Plan		

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 12-T23S-R28E

Site Position:		**Northing:**	482,006.50 ft	**Latitude:**	32° 19' 29.227 N
From:	*Map*	***Easting:***	629,491.90 ft	***Longitude:***	104° 2' 52.596 W
Position Uncertainty:	0.0 ft	**Slot Radius:**	"	**Grid Convergence:**	0.15 °

Well Longview Fed 1-13H

Well Position	**+N/-S**	0.0 ft	**Northing:**	482,006.50 ft	**Latitude:**	32° 19' 29.227 N
	+E/-W	0.0 ft	**Easting:**	629,491.90 ft	**Longitude:**	104° 2' 52.596 W
Position Uncertainty		0.0 ft	**Wellhead Elevation:**	ft	**Ground Level:**	0.0 ft

Wellbore Wellbore #1

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	2012/10/26	7.65	60.16	48,513

Design Prelim Plan

Audit Notes:

Version:		**Phase:**	PROTOTYPE	**Tie On Depth:**	0.0

Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.0	0.0	0.0	359.30

Plan Sections

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
7,981.5	0.00	0.00	7,981.5	0.0	0.0	0.00	0.00	0.00	0.00	
8,731.5	90.00	359.30	8,459.0	477.4	-5.8	12.00	12.00	0.00	359.30	
14,190.8	90.00	359.30	8,459.0	5,936.3	-72.2	0.00	0.00	0.00	0.00	Longview Fed 1-13I

Wolverine Directional, LLC
Planning Report

Database:	EDM 2003.21 Single User Db	**Local Co-ordinate Reference:**	Well Longview Fed 1-13H
Company:	RKI Exploration & Production	**TVD Reference:**	WELL @ 0.0ft (Original Well Elev)
Project:	Eddy County (NM83E)	**MD Reference:**	WELL @ 0.0ft (Original Well Elev)
Site:	Sec 12-T23S-R28E	**North Reference:**	True
Well:	Longview Fed 1-13H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Prelim Plan		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	0.00
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	0.00
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	0.00
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	0.00
2,100.0	0.00	0.00	2,100.0	0.0	0.0	0.0	0.00	0.00	0.00
2,200.0	0.00	0.00	2,200.0	0.0	0.0	0.0	0.00	0.00	0.00
2,300.0	0.00	0.00	2,300.0	0.0	0.0	0.0	0.00	0.00	0.00
2,400.0	0.00	0.00	2,400.0	0.0	0.0	0.0	0.00	0.00	0.00
2,500.0	0.00	0.00	2,500.0	0.0	0.0	0.0	0.00	0.00	0.00
2,600.0	0.00	0.00	2,600.0	0.0	0.0	0.0	0.00	0.00	0.00
2,700.0	0.00	0.00	2,700.0	0.0	0.0	0.0	0.00	0.00	0.00
2,800.0	0.00	0.00	2,800.0	0.0	0.0	0.0	0.00	0.00	0.00
2,900.0	0.00	0.00	2,900.0	0.0	0.0	0.0	0.00	0.00	0.00
3,000.0	0.00	0.00	3,000.0	0.0	0.0	0.0	0.00	0.00	0.00
3,100.0	0.00	0.00	3,100.0	0.0	0.0	0.0	0.00	0.00	0.00
3,200.0	0.00	0.00	3,200.0	0.0	0.0	0.0	0.00	0.00	0.00
3,300.0	0.00	0.00	3,300.0	0.0	0.0	0.0	0.00	0.00	0.00
3,400.0	0.00	0.00	3,400.0	0.0	0.0	0.0	0.00	0.00	0.00
3,500.0	0.00	0.00	3,500.0	0.0	0.0	0.0	0.00	0.00	0.00
3,600.0	0.00	0.00	3,600.0	0.0	0.0	0.0	0.00	0.00	0.00
3,700.0	0.00	0.00	3,700.0	0.0	0.0	0.0	0.00	0.00	0.00
3,800.0	0.00	0.00	3,800.0	0.0	0.0	0.0	0.00	0.00	0.00
3,900.0	0.00	0.00	3,900.0	0.0	0.0	0.0	0.00	0.00	0.00
4,000.0	0.00	0.00	4,000.0	0.0	0.0	0.0	0.00	0.00	0.00
4,100.0	0.00	0.00	4,100.0	0.0	0.0	0.0	0.00	0.00	0.00
4,200.0	0.00	0.00	4,200.0	0.0	0.0	0.0	0.00	0.00	0.00
4,300.0	0.00	0.00	4,300.0	0.0	0.0	0.0	0.00	0.00	0.00
4,400.0	0.00	0.00	4,400.0	0.0	0.0	0.0	0.00	0.00	0.00
4,500.0	0.00	0.00	4,500.0	0.0	0.0	0.0	0.00	0.00	0.00
4,600.0	0.00	0.00	4,600.0	0.0	0.0	0.0	0.00	0.00	0.00
4,700.0	0.00	0.00	4,700.0	0.0	0.0	0.0	0.00	0.00	0.00
4,800.0	0.00	0.00	4,800.0	0.0	0.0	0.0	0.00	0.00	0.00
4,900.0	0.00	0.00	4,900.0	0.0	0.0	0.0	0.00	0.00	0.00
5,000.0	0.00	0.00	5,000.0	0.0	0.0	0.0	0.00	0.00	0.00
5,100.0	0.00	0.00	5,100.0	0.0	0.0	0.0	0.00	0.00	0.00
5,200.0	0.00	0.00	5,200.0	0.0	0.0	0.0	0.00	0.00	0.00
5,300.0	0.00	0.00	5,300.0	0.0	0.0	0.0	0.00	0.00	0.00

Wolverine Directional, LLC
Planning Report

Database:	EDM 2003.21 Single User Db	**Local Co-ordinate Reference:**	Well Longview Fed 1-13H
Company:	RKI Exploration & Production	**TVD Reference:**	WELL @ 0.0ft (Original Well Elev)
Project:	Eddy County (NM83E)	**MD Reference:**	WELL @ 0.0ft (Original Well Elev)
Site:	Sec 12-T23S-R28E	**North Reference:**	True
Well:	Longview Fed 1-13H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Prelim Plan		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
5,400.0	0.00	0.00	5,400.0	0.0	0.0	0.0	0.00	0.00	0.00
5,500.0	0.00	0.00	5,500.0	0.0	0.0	0.0	0.00	0.00	0.00
5,600.0	0.00	0.00	5,600.0	0.0	0.0	0.0	0.00	0.00	0.00
5,700.0	0.00	0.00	5,700.0	0.0	0.0	0.0	0.00	0.00	0.00
5,800.0	0.00	0.00	5,800.0	0.0	0.0	0.0	0.00	0.00	0.00
5,900.0	0.00	0.00	5,900.0	0.0	0.0	0.0	0.00	0.00	0.00
6,000.0	0.00	0.00	6,000.0	0.0	0.0	0.0	0.00	0.00	0.00
6,100.0	0.00	0.00	6,100.0	0.0	0.0	0.0	0.00	0.00	0.00
6,200.0	0.00	0.00	6,200.0	0.0	0.0	0.0	0.00	0.00	0.00
6,300.0	0.00	0.00	6,300.0	0.0	0.0	0.0	0.00	0.00	0.00
6,400.0	0.00	0.00	6,400.0	0.0	0.0	0.0	0.00	0.00	0.00
6,500.0	0.00	0.00	6,500.0	0.0	0.0	0.0	0.00	0.00	0.00
6,600.0	0.00	0.00	6,600.0	0.0	0.0	0.0	0.00	0.00	0.00
6,700.0	0.00	0.00	6,700.0	0.0	0.0	0.0	0.00	0.00	0.00
6,800.0	0.00	0.00	6,800.0	0.0	0.0	0.0	0.00	0.00	0.00
6,900.0	0.00	0.00	6,900.0	0.0	0.0	0.0	0.00	0.00	0.00
7,000.0	0.00	0.00	7,000.0	0.0	0.0	0.0	0.00	0.00	0.00
7,100.0	0.00	0.00	7,100.0	0.0	0.0	0.0	0.00	0.00	0.00
7,200.0	0.00	0.00	7,200.0	0.0	0.0	0.0	0.00	0.00	0.00
7,300.0	0.00	0.00	7,300.0	0.0	0.0	0.0	0.00	0.00	0.00
7,400.0	0.00	0.00	7,400.0	0.0	0.0	0.0	0.00	0.00	0.00
7,500.0	0.00	0.00	7,500.0	0.0	0.0	0.0	0.00	0.00	0.00
7,600.0	0.00	0.00	7,600.0	0.0	0.0	0.0	0.00	0.00	0.00
7,700.0	0.00	0.00	7,700.0	0.0	0.0	0.0	0.00	0.00	0.00
7,800.0	0.00	0.00	7,800.0	0.0	0.0	0.0	0.00	0.00	0.00
7,900.0	0.00	0.00	7,900.0	0.0	0.0	0.0	0.00	0.00	0.00
7,981.5	0.00	0.00	7,981.5	0.0	0.0	0.0	0.00	0.00	0.00
KOP - 12/100									
8,000.0	2.22	359.30	8,000.0	0.4	0.0	0.4	12.00	12.00	0.00
8,025.0	5.22	359.30	8,024.9	2.0	0.0	2.0	12.00	12.00	0.00
8,050.0	8.22	359.30	8,049.8	4.9	-0.1	4.9	12.00	12.00	0.00
8,075.0	11.22	359.30	8,074.4	9.1	-0.1	9.1	12.00	12.00	0.00
8,100.0	14.22	359.30	8,098.8	14.6	-0.2	14.6	12.00	12.00	0.00
8,125.0	17.22	359.30	8,122.9	21.4	-0.3	21.4	12.00	12.00	0.00
8,150.0	20.22	359.30	8,146.5	29.4	-0.4	29.4	12.00	12.00	0.00
8,175.0	23.22	359.30	8,169.7	38.7	-0.5	38.7	12.00	12.00	0.00
8,200.0	26.22	359.30	8,192.5	49.1	-0.6	49.1	12.00	12.00	0.00
8,225.0	29.22	359.30	8,214.6	60.7	-0.7	60.7	12.00	12.00	0.00
8,250.0	32.22	359.30	8,236.1	73.5	-0.9	73.5	12.00	12.00	0.00
8,275.0	35.22	359.30	8,256.9	87.4	-1.1	87.4	12.00	12.00	0.00
8,300.0	38.22	359.30	8,276.9	102.3	-1.2	102.3	12.00	12.00	0.00
8,325.0	41.22	359.30	8,296.1	118.3	-1.4	118.3	12.00	12.00	0.00
8,350.0	44.22	359.30	8,314.5	135.2	-1.6	135.3	12.00	12.00	0.00
8,375.0	47.22	359.30	8,332.0	153.1	-1.9	153.2	12.00	12.00	0.00
8,400.0	50.22	359.30	8,348.4	171.9	-2.1	171.9	12.00	12.00	0.00
8,425.0	53.22	359.30	8,363.9	191.5	-2.3	191.6	12.00	12.00	0.00
8,450.0	56.22	359.30	8,378.4	211.9	-2.6	212.0	12.00	12.00	0.00
8,475.0	59.22	359.30	8,391.7	233.1	-2.8	233.1	12.00	12.00	0.00
8,500.0	62.22	359.30	8,404.0	254.9	-3.1	254.9	12.00	12.00	0.00
8,525.0	65.22	359.30	8,415.0	277.3	-3.4	277.3	12.00	12.00	0.00
8,550.0	68.22	359.30	8,424.9	300.3	-3.7	300.3	12.00	12.00	0.00
8,575.0	71.22	359.30	8,433.6	323.7	-3.9	323.7	12.00	12.00	0.00
8,600.0	74.22	359.30	8,441.0	347.6	-4.2	347.6	12.00	12.00	0.00

Database:	EDM 2003.21 Single User Db	**Local Co-ordinate Reference:**	Well Longview Fed 1-13H
Company:	RKI Exploration & Production	**TVD Reference:**	WELL @ 0.0ft (Original Well Elev)
Project:	Eddy County (NM83E)	**MD Reference:**	WELL @ 0.0ft (Original Well Elev)
Site:	Sec 12-T23S-R28E	**North Reference:**	True
Well:	Longview Fed 1-13H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Prelim Plan		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
8,625.0	77.22	359.30	8,447.2	371.8	-4.5	371.8	12.00	12.00	0.00
8,650.0	80.22	359.30	8,452.1	396.3	-4.8	396.3	12.00	12.00	0.00
8,675.0	83.22	359.30	8,455.7	421.0	-5.1	421.1	12.00	12.00	0.00
8,700.0	86.22	359.30	8,458.0	445.9	-5.4	446.0	12.00	12.00	0.00
8,725.0	89.22	359.30	8,459.0	470.9	-5.7	470.9	12.00	12.00	0.00
8,731.5	90.00	359.30	8,459.0	477.4	-5.8	477.5	12.00	12.00	0.00
EOC - Hold to TD									
8,800.0	90.00	359.30	8,459.0	545.9	-6.6	545.9	0.00	0.00	0.00
8,900.0	90.00	359.30	8,459.0	645.9	-7.9	645.9	0.00	0.00	0.00
9,000.0	90.00	359.30	8,459.0	745.9	-9.1	745.9	0.00	0.00	0.00
9,100.0	90.00	359.30	8,459.0	845.9	-10.3	845.9	0.00	0.00	0.00
9,200.0	90.00	359.30	8,459.0	945.9	-11.5	945.9	0.00	0.00	0.00
9,300.0	90.00	359.30	8,459.0	1,045.9	-12.7	1,045.9	0.00	0.00	0.00
9,400.0	90.00	359.30	8,459.0	1,145.8	-13.9	1,145.9	0.00	0.00	0.00
9,500.0	90.00	359.30	8,459.0	1,245.8	-15.1	1,245.9	0.00	0.00	0.00
9,600.0	90.00	359.30	8,459.0	1,345.8	-16.4	1,345.9	0.00	0.00	0.00
9,700.0	90.00	359.30	8,459.0	1,445.8	-17.6	1,445.9	0.00	0.00	0.00
9,800.0	90.00	359.30	8,459.0	1,545.8	-18.8	1,545.9	0.00	0.00	0.00
9,900.0	90.00	359.30	8,459.0	1,645.8	-20.0	1,645.9	0.00	0.00	0.00
10,000.0	90.00	359.30	8,459.0	1,745.8	-21.2	1,745.9	0.00	0.00	0.00
10,100.0	90.00	359.30	8,459.0	1,845.8	-22.4	1,845.9	0.00	0.00	0.00
10,200.0	90.00	359.30	8,459.0	1,945.8	-23.7	1,945.9	0.00	0.00	0.00
10,300.0	90.00	359.30	8,459.0	2,045.8	-24.9	2,045.9	0.00	0.00	0.00
10,400.0	90.00	359.30	8,459.0	2,145.8	-26.1	2,145.9	0.00	0.00	0.00
10,500.0	90.00	359.30	8,459.0	2,245.8	-27.3	2,245.9	0.00	0.00	0.00
10,600.0	90.00	359.30	8,459.0	2,345.8	-28.5	2,345.9	0.00	0.00	0.00
10,700.0	90.00	359.30	8,459.0	2,445.7	-29.7	2,445.9	0.00	0.00	0.00
10,800.0	90.00	359.30	8,459.0	2,545.7	-31.0	2,545.9	0.00	0.00	0.00
10,900.0	90.00	359.30	8,459.0	2,645.7	-32.2	2,645.9	0.00	0.00	0.00
11,000.0	90.00	359.30	8,459.0	2,745.7	-33.4	2,745.9	0.00	0.00	0.00
11,100.0	90.00	359.30	8,459.0	2,845.7	-34.6	2,845.9	0.00	0.00	0.00
11,200.0	90.00	359.30	8,459.0	2,945.7	-35.8	2,945.9	0.00	0.00	0.00
11,300.0	90.00	359.30	8,459.0	3,045.7	-37.0	3,045.9	0.00	0.00	0.00
11,400.0	90.00	359.30	8,459.0	3,145.7	-38.3	3,145.9	0.00	0.00	0.00
11,500.0	90.00	359.30	8,459.0	3,245.7	-39.5	3,245.9	0.00	0.00	0.00
11,600.0	90.00	359.30	8,459.0	3,345.7	-40.7	3,345.9	0.00	0.00	0.00
11,700.0	90.00	359.30	8,459.0	3,445.7	-41.9	3,445.9	0.00	0.00	0.00
11,800.0	90.00	359.30	8,459.0	3,545.7	-43.1	3,545.9	0.00	0.00	0.00
11,900.0	90.00	359.30	8,459.0	3,645.7	-44.3	3,645.9	0.00	0.00	0.00
12,000.0	90.00	359.30	8,459.0	3,745.7	-45.5	3,745.9	0.00	0.00	0.00
12,100.0	90.00	359.30	8,459.0	3,845.6	-46.8	3,845.9	0.00	0.00	0.00
12,200.0	90.00	359.30	8,459.0	3,945.6	-48.0	3,945.9	0.00	0.00	0.00
12,300.0	90.00	359.30	8,459.0	4,045.6	-49.2	4,045.9	0.00	0.00	0.00
12,400.0	90.00	359.30	8,459.0	4,145.6	-50.4	4,145.9	0.00	0.00	0.00
12,500.0	90.00	359.30	8,459.0	4,245.6	-51.6	4,245.9	0.00	0.00	0.00
12,600.0	90.00	359.30	8,459.0	4,345.6	-52.8	4,345.9	0.00	0.00	0.00
12,700.0	90.00	359.30	8,459.0	4,445.6	-54.1	4,445.9	0.00	0.00	0.00
12,800.0	90.00	359.30	8,459.0	4,545.6	-55.3	4,545.9	0.00	0.00	0.00
12,900.0	90.00	359.30	8,459.0	4,645.6	-56.5	4,645.9	0.00	0.00	0.00
13,000.0	90.00	359.30	8,459.0	4,745.6	-57.7	4,745.9	0.00	0.00	0.00
13,100.0	90.00	359.30	8,459.0	4,845.6	-58.9	4,845.9	0.00	0.00	0.00
13,200.0	90.00	359.30	8,459.0	4,945.6	-60.1	4,945.9	0.00	0.00	0.00
13,300.0	90.00	359.30	8,459.0	5,045.6	-61.4	5,045.9	0.00	0.00	0.00
13,400.0	90.00	359.30	8,459.0	5,145.5	-62.6	5,145.9	0.00	0.00	0.00

Wolverine Directional, LLC
Planning Report

Database:	EDM 2003.21 Single User Db	**Local Co-ordinate Reference:**	Well Longview Fed 1-13H
Company:	RKI Exploration & Production	**TVD Reference:**	WELL @ 0.0ft (Original Well Elev)
Project:	Eddy County (NM83E)	**MD Reference:**	WELL @ 0.0ft (Original Well Elev)
Site:	Sec 12-T23S-R28E	**North Reference:**	True
Well:	Longview Fed 1-13H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Prelim Plan		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
13,500.0	90.00	359.30	8,459.0	5,245.5	-63.8	5,245.9	0.00	0.00	0.00
13,600.0	90.00	359.30	8,459.0	5,345.5	-65.0	5,345.9	0.00	0.00	0.00
13,700.0	90.00	359.30	8,459.0	5,445.5	-66.2	5,445.9	0.00	0.00	0.00
13,800.0	90.00	359.30	8,459.0	5,545.5	-67.4	5,545.9	0.00	0.00	0.00
13,900.0	90.00	359.30	8,459.0	5,645.5	-68.7	5,645.9	0.00	0.00	0.00
14,000.0	90.00	359.30	8,459.0	5,745.5	-69.9	5,745.9	0.00	0.00	0.00
14,100.0	90.00	359.30	8,459.0	5,845.5	-71.1	5,845.9	0.00	0.00	0.00
14,190.8	90.00	359.30	8,459.0	5,936.3	-72.2	5,936.8	0.00	0.00	0.00
TD at 14190.8 - Longview Fed 1-13H PBHL									

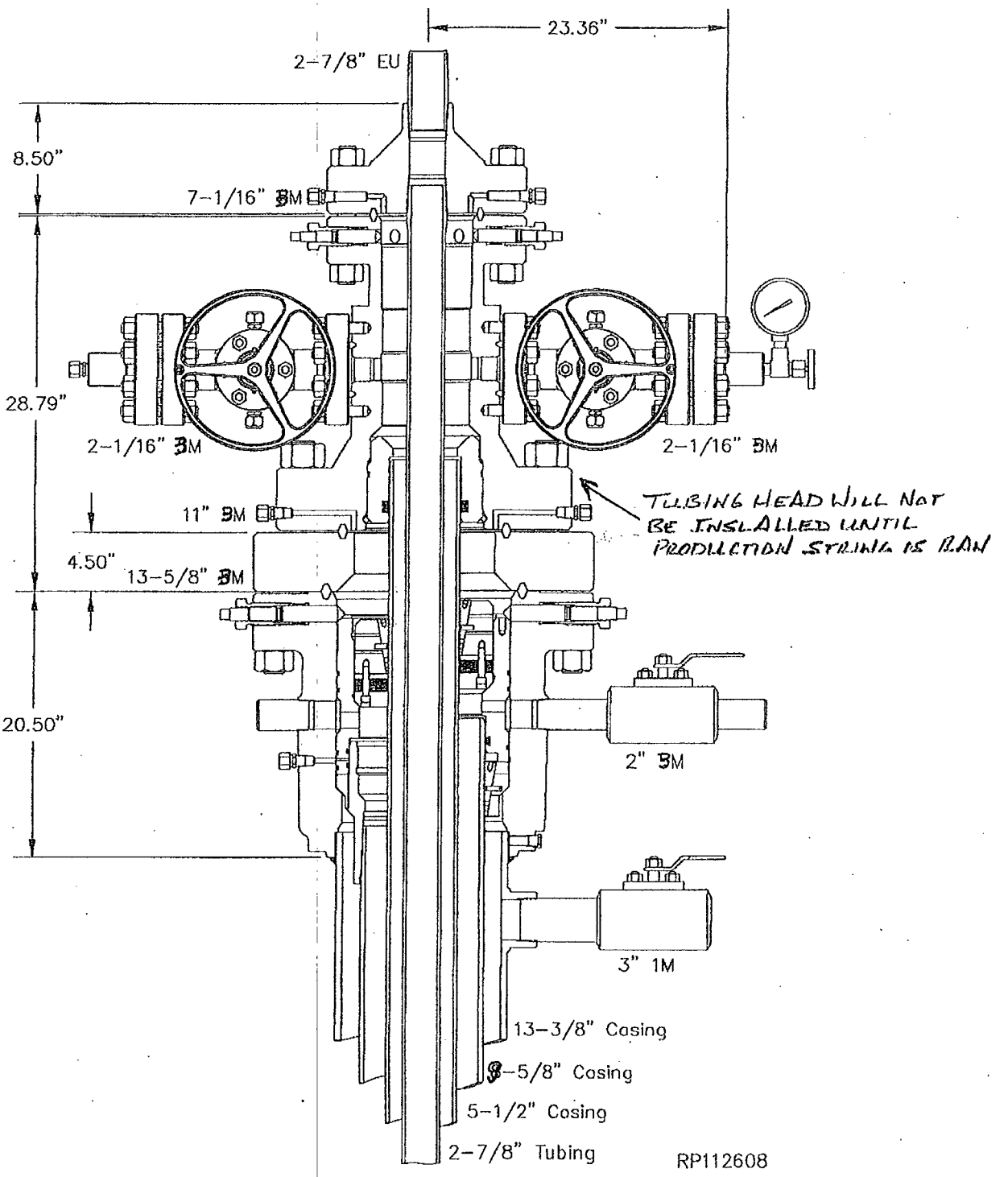
Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
Longview Fed 1-13H I - plan hits target - Point	0.00	0.00	8,459.0	5,936.3	-72.2	487,942.60	629,403.90	32° 20' 27.972 N	104° 2' 53.437 W

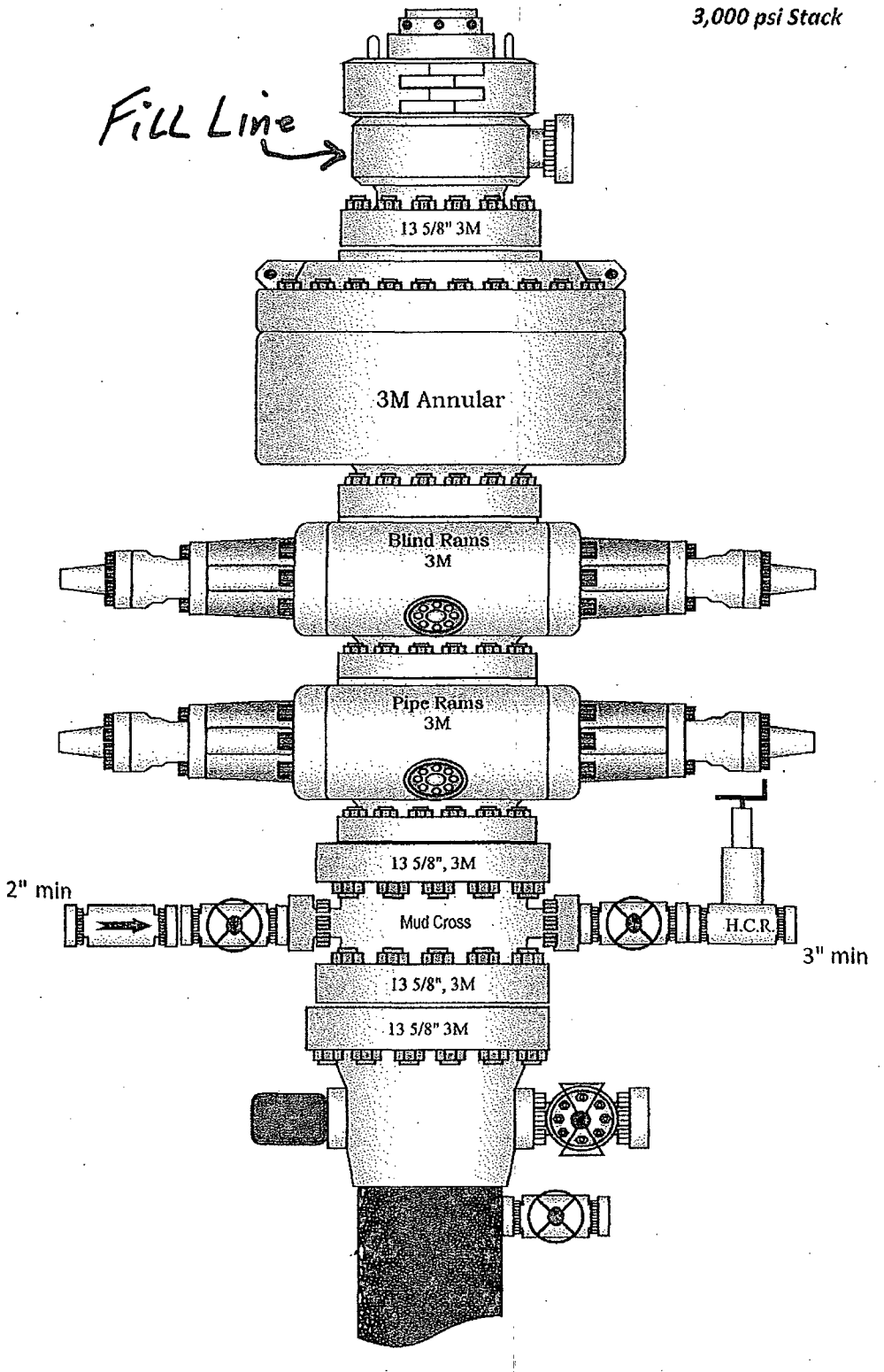
Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates +N/-S (ft)	Local Coordinates +E/-W (ft)	Comment
7,981.5	7,981.5	0.0	0.0	KOP - 12/100
8,731.5	8,459.0	477.4	-5.8	EOC - Hold to TD
14,190.8	8,459.0	5,936.3	-72.2	TD at 14190.8

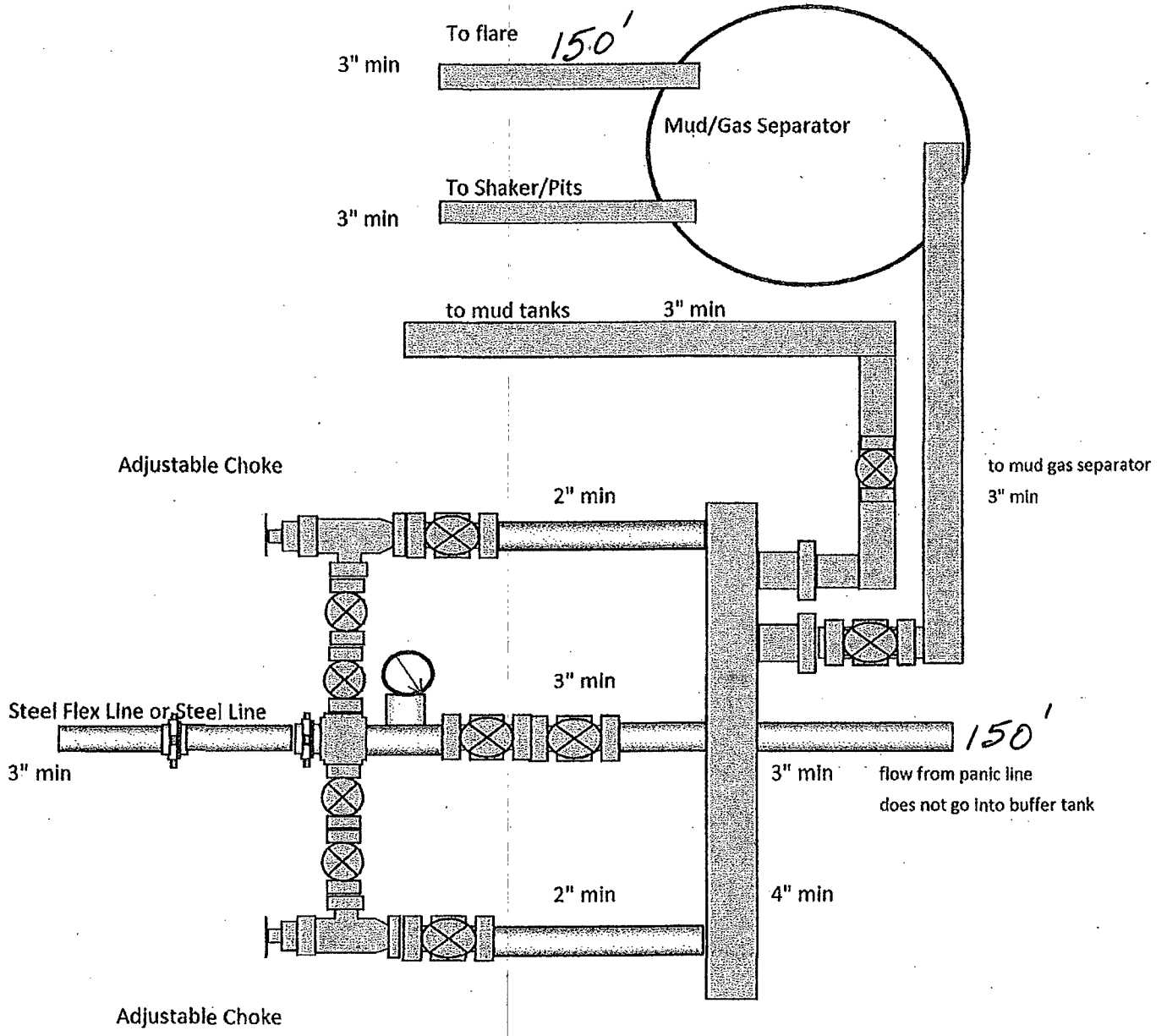
System Drawing



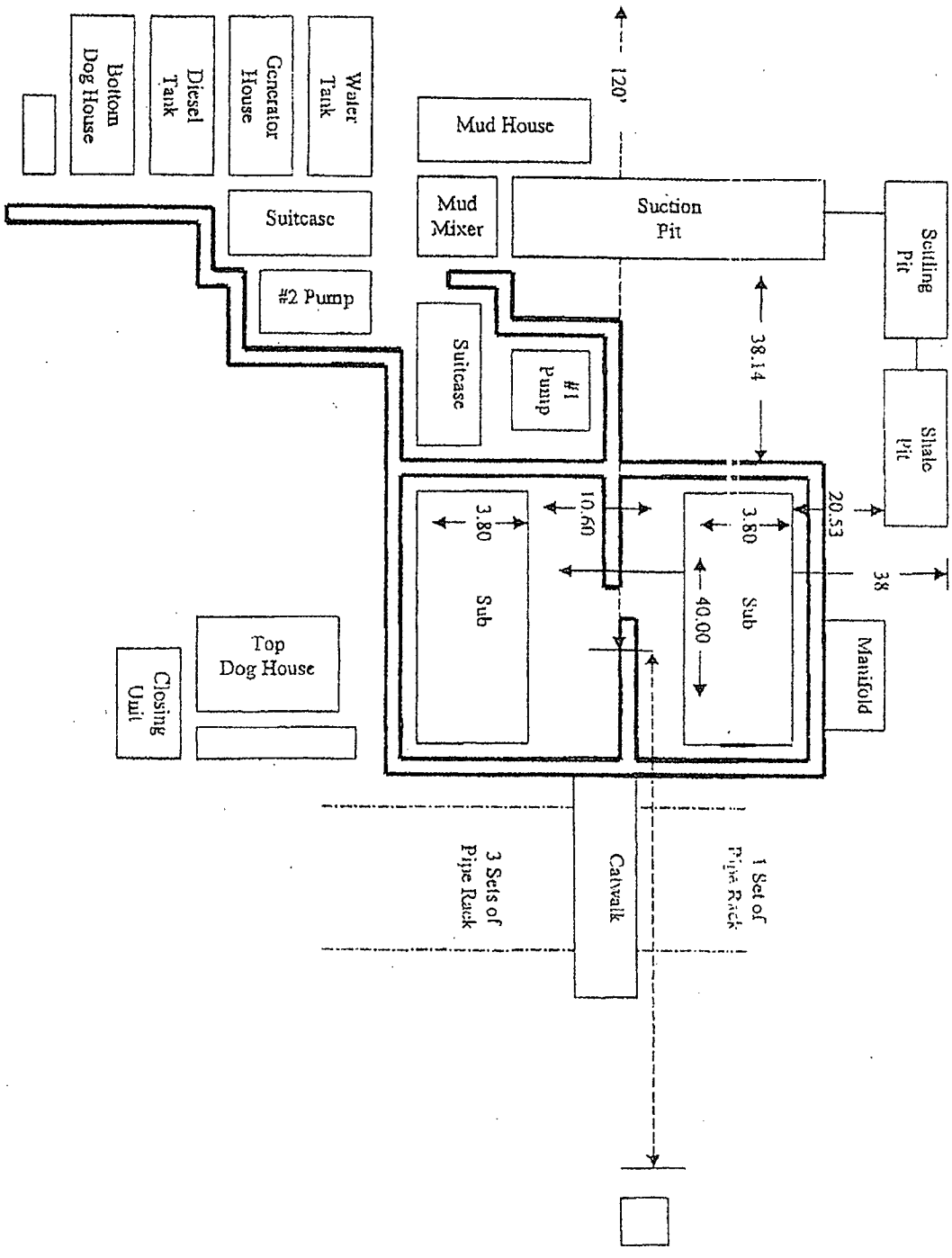
3,000 psi Stack



3,000 psi Manifold



Plat for Closed Loop System



RKI Exploration and Production
3817 N. W. Expressway, Suite 950
Oklahoma City, OK. 73112

Closed Loop System

Design Plan

Equipment List

2 – 414 Swaco Centrifuges
2 – 4 screen Mongoose shale shakers
2 – 250 bbl. tanks to hold fluid
2 – CRI Bins with track system
2 – 500 bbl. frac tanks for fresh water
2 – 500 bbl. frac tanks for brine water

Operation and Maintenance

- Closed Loop equipment will be inspected daily by each tour and any necessary maintenance performed
- Any leak in system will be repaired and/or contained immediately
- OCD notified within 48 hours
- Remediation process started

Closure Plan

During drilling operations, all liquids, drilling fluids and cuttings will be hauled off via CRI (Controlled Recovery Incorporated). Permit #: R-9166.

RKI Exploration & Production

HYDROGEN SULFIDE (H2S) CONTINGENCY DRILLING PLAN

This well and its anticipated facility are not expected to have hydrogen sulfide releases. However, there may be hydrogen sulfide production in the nearby area. There are no private residences in the area but a contingency plan has been orchestrated. RKI Exploration & Production will have a company representative available to rig personnel throughout the drilling and production operations. If hydrogen sulfide is detected or suspected, monitoring equipment will be acquired for monitoring and or testing.

GENERAL H2S EMERGENCY ACTIONS

1. All personnel will immediately evacuate to an up-wind and if possible up- hill "safe area".
2. If for any reason a person must enter the hazardous area, they must wear a SCBA (Self Contained Breathing Apparatus).
3. Always use the "buddy system"
4. Isolate the well/problem if possible
5. Account for all personnel
6. Display the proper colors warning all unsuspecting personnel of the danger at hand.
7. Contact the Company personnel as soon as possible if not at the location (use the enclosed call list)

All communication will be via two-way radio or cell phone.

At this point the company representative will evaluate the situation and coordinate the necessary duties to bring the situation under control, and if necessary, the notification of the emergency response agencies and nearby residents.

EMERGENCY PROCEDURES FOR AN UNCONTROLLABLE RELEASE OF H2S

1. All personnel will don the self-contained breathing apparatus
2. Remove all personnel to the "safe area" (always use the buddy system)
3. Contact company personnel if not on location
4. Set in motion the steps to protect and or remove the general public to an upwind "safe area". Maintain strict security and safety procedures while dealing with the source.
5. No entry to any unauthorized personnel
6. Notify the appropriate agencies.
7. Call NMOCD

If at this time the supervising person determines the release of the H2S cannot be contained to the site location and the general public is in danger he will take the necessary steps to protect the workers and the public.

EMERGENCY CALL LIST (Start and continue until ONE of these people has been contacted)

RKI Exploration & Production	1-800-667-6958
Frank Collins	575-725-9334
Ken Fairchild	405-693-6051
Lonnie Catt	575-202-1444
Brent Umberham	405-623-5080
Tim Haddican	405-823-2872

EMERGENCY RESPONSE NUMBERS

State Police	Eddy County	575-748-9718
State Police	Lea County	575-392-5588
Sheriff	Eddy County	575-746-2701
Emergency Medical	Eddy County	911 or 505-746-2701
Ambulance	Lea County	911 or 505-394-3258
Emergency Response	Eddy County SERC	575-476-2701
Carlsbad Police Dept		575-885-2111
Carlsbad Fire Dept		575-885-3125
Loco Hills Police Dept		575-677-2349
Jal Police Dept		575-395-2501
Jal Fire Dept		575-394-3258
Jal Abulance		575-395-2221

NMOCD	District 1 (Lea, Roosevelt, Curry)	575-393-6161
	District 2 (Eddy, Chavez)	575-392-2973
Baker	Artesia	575-746-3140
Halliburton	Artesia	1-800-523-2482
	Hobbs	1-800-523-2482
ParFive	Artesia	575-748-1288
Wild Well Control	Midland	432-550-6202

PROTECTION OF THE GENERAL PUBLIC

1. 100 ppm at any public area (any place not associated with this site)

2. 500 ppm at any public road (any road the general public may travel)

3. 100 ppm radius of ¼ mile in New Mexico will be assumed if there is insufficient data to calculate radius of exposure and there is reasonable expectation that H2S could be present in concentrations greater than 100 ppm in the gas mixture.

CALCULATION FOR THE 100 PPM (ROE) "PASQULL-GIFFFORD EQUATION

X = ((1.589)(mole fraction)(Q – volume in scf))^0.6258

CALCULATION FOR THE 500 PPM (ROE)

X = ((.4546)(mole fraction)(Q – volume in scf))^0.6258

Example:

A well is determined to have 150 / 500 ppm H2S in the gas mixture and the well/facility is producing at a gas rate of 100 mcfd

150 ppm
X = ((1.589)(150/100,000)(100,000))^0.6258 = 7 ft

500 ppm
X = ((.4546)(500/100,000)(100,000))^0.6258 = 3.3 ft

These calculations will be forwarded to the appropriate NMOCD office when applicable

PUBLIC EVACUATION PLAN

1. Notification of the emergency response agencies of the hazardous condition and implement evacuation procedures.

2. A trained person in H2S safety shall monitor with detection equipment the H2S concentration, wind and area of exposure. This person will determine the outer perimeter of the hazardous area. The extent of the evaluation area will be determined from the data being collected.

3. Law enforcement shall be notified to set up necessary barriers and maintain such for the duration of the situation as well as aid in the evacuation procedure. The company supervisor shall stay in communications with all agencies through the duration of the situation and inform them when the situation has been contained and the affected area(s) is safe to enter.

IGNITION OF THE GAS

1. Human life and or property are in danger

2. There is no hope of bringing the situation under control with the prevailing conditions at the site

3. Two people are required. They must be equipped with positive pressure, self-contained breathing apparatus and "D" ring style full body, OSHA approved safety harness. Non-flammable rope will be attached.

4. One of the people will be qualified safety person who will test the atmosphere for H2S, oxygen and LFL. The other person will be the company supervisor, he is responsible for igniting the well.

5. Ignite up wind from a distance no closer than necessary. Before igniting, make a final check of combustible gases.

6. Following ignition, continue with the emergency actions and procedures as before.

Characteristics of H2S and S02

Common Name	Chemical Formula	Specific Gravity	Threshold Limit	Hazardous Limit	Lethal Concentration
Hydrogen Sulfide	H_2S	1.189 Air= 1	10 ppm	100 ppm/hr	600 ppm
Sulfur Dioxide	SO_2	2.21 Air= 1	2ppm	N/A	1000 ppm

REQUIRED EMERGENCY EQUIPMENT

1. Breathing apparatus

   Rescue Packs (SCBA) – 1 unit shall be placed at each breathing area, 2 shall be stored in the safety trailer with radio communications.

   Work/Escape Packs – 4 packs shall be stored on the rig floor with sufficient air hose not to restrict work activity.

   Emergency Escape Packs – 4 – packs shall be stored in the doghouse for emergency evacuation.

2. Signage and Flagging

   One color cod condition sign will be placed at the entrance to the site indicating possible conditions at the site

   A colored conditions flag will be on display, indicating the conditions at the site at the time

3. Briefing Area (see attachment)

4. Wind Socks

   Two windsocks will be placed in strategic locations, visible from all angles

5. H2S Detectors & Alarms

   The stationary detector with three sensors will be placed in the upper dog house if equipped, set to visually alarm @ 10 ppm and audible at 14 ppm. Calibrate a minimum of every 30 days or as needed. The sensors will be placed in the following places: (gas sample tubes will be stored in the safety trailer)

   Rig floor
   Bell nipple
   End of flow line or where well bore fluid is being discharged

6. Auxiliary Rescue Equipment and misc.

   Stretcher
   Two OSHA full body harnesses
   100 ft. 5/8" OSHA approved rope
   1 – 20# class ABC fire extinguisher
   Communication via cell phones on location and vehicles on location
   Flare gun/flares

Well Control Equipment

1. BOP Equipment

5,000 psi blowout preventer (pipe and blind rams)
5,000 psi annular preventer
5,000 psi rotating head
5,000 choke manifold (equipped with hydraulic choke)
Mud/gas separator
Flare stack with solar powered igniter (with battery backup igniter) 150' from the well

Mud info and H2S Operating Mud Conditions

Though no H_2S is anticipated during the drilling operation, this contingency plan will provide for methods to ensure the well is kept under control in the event an H_2S reading of 100 ppm or more are encountered. Once personnel are safe and the proper protective gear is in place and on personnel, the operator and rig crew essential personnel will ensure the well is under control, suspend drilling operations and shut-in the well (unless pressure build up or other operational situations dictate suspending operations will prevent well control), increase the mud weight and circulate all gas from the hole utilizing the mud/gas separator downstream of the choke, the choke manifold and the emergency flare system located 150' from the well. Bring the mud system into compliance and the H_2S level below 10 ppm, then notify all emergency officers that drilling ahead is practical and safe. Proceed with drilling ahead only after all provisions of Onshore Order 6, Section III.C. have been satisfied. Mud will be a fresh water/brine system with the proper H2S scavengers on location and utilized when necessary. Mud pH will also be kept at a level to minimize sulfide stress cracking and embrittlement when H2S is present in the mud system.

H2S Briefing Areas & Alarm Locations

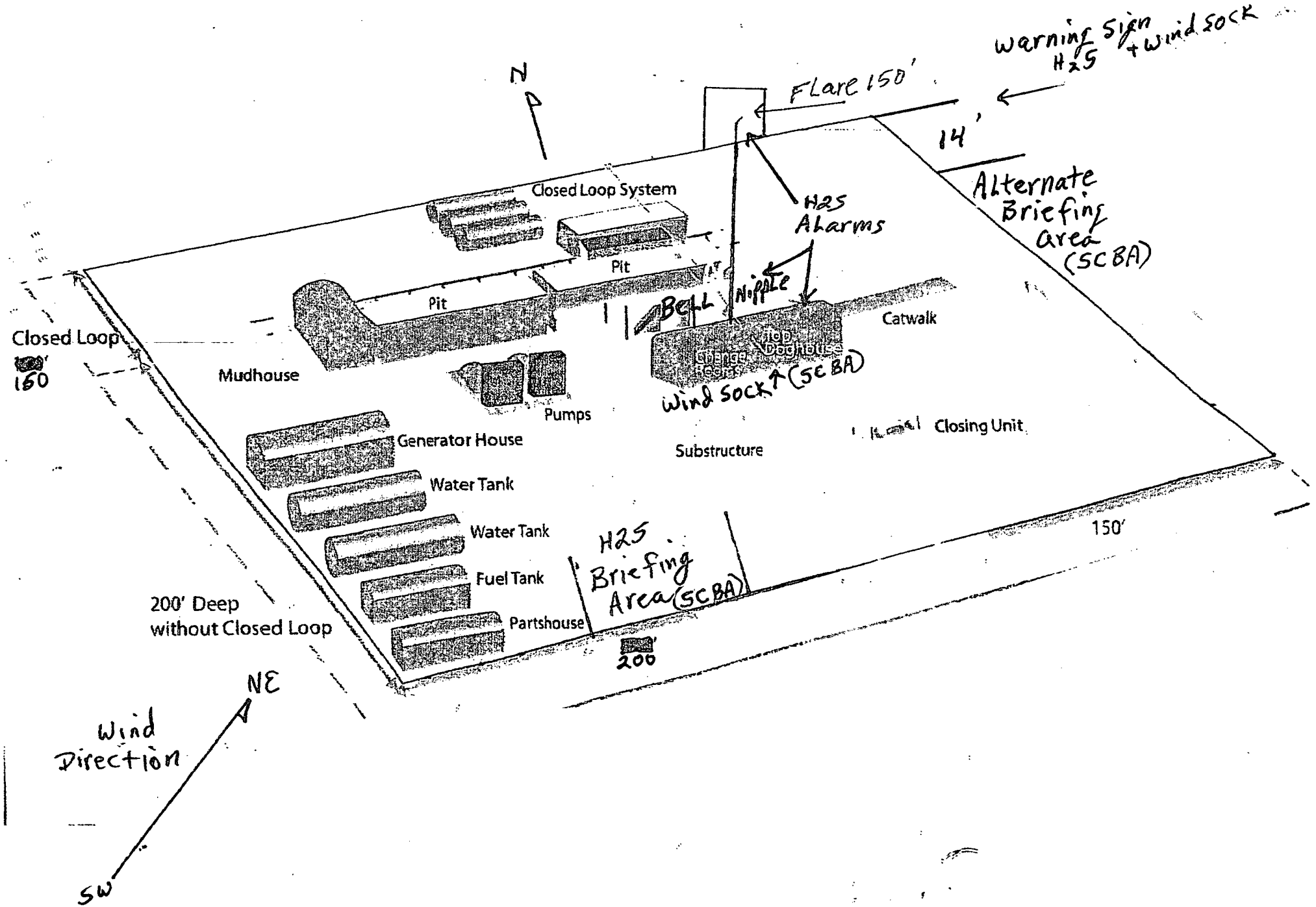
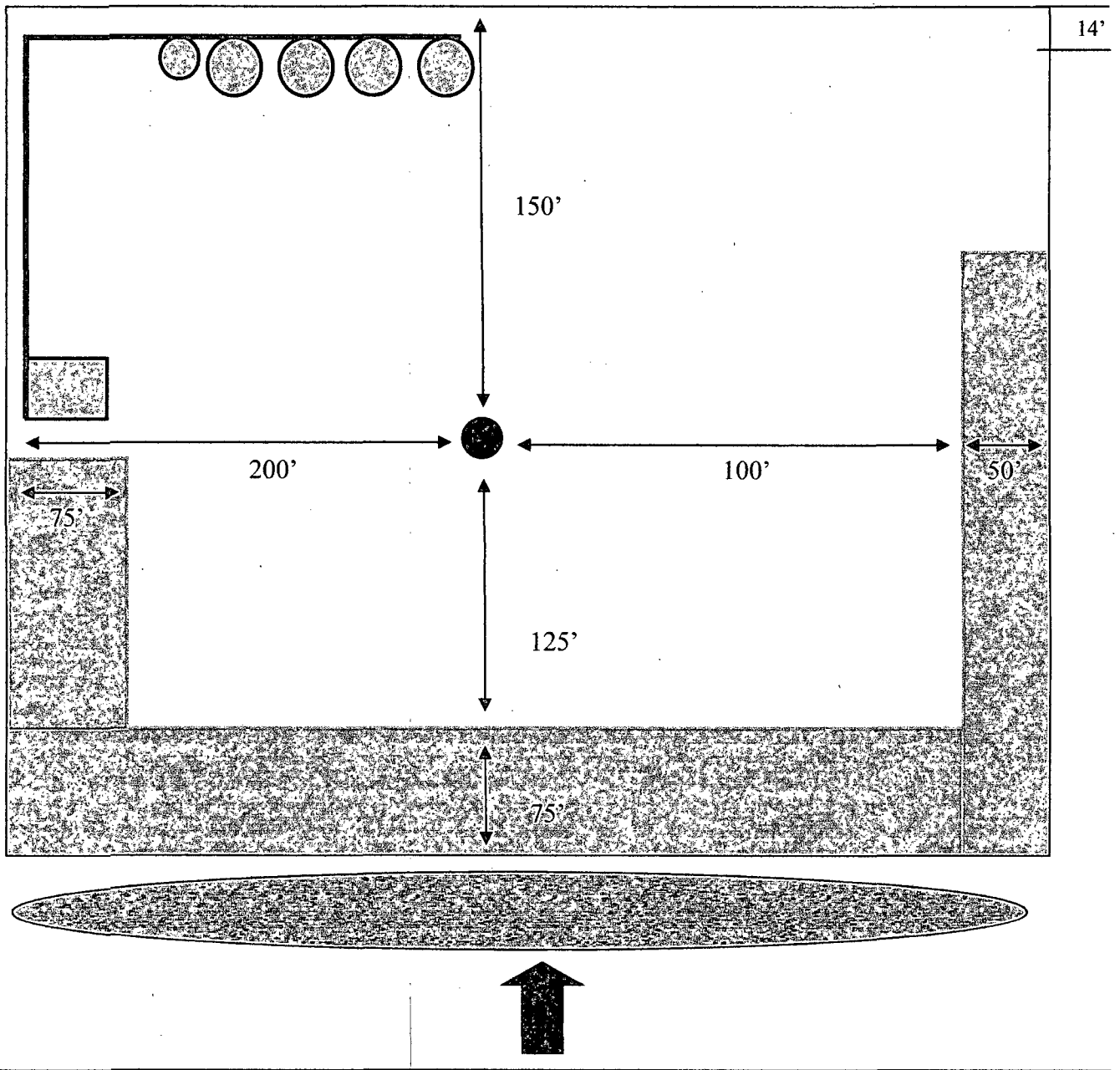


EXHIBIT C

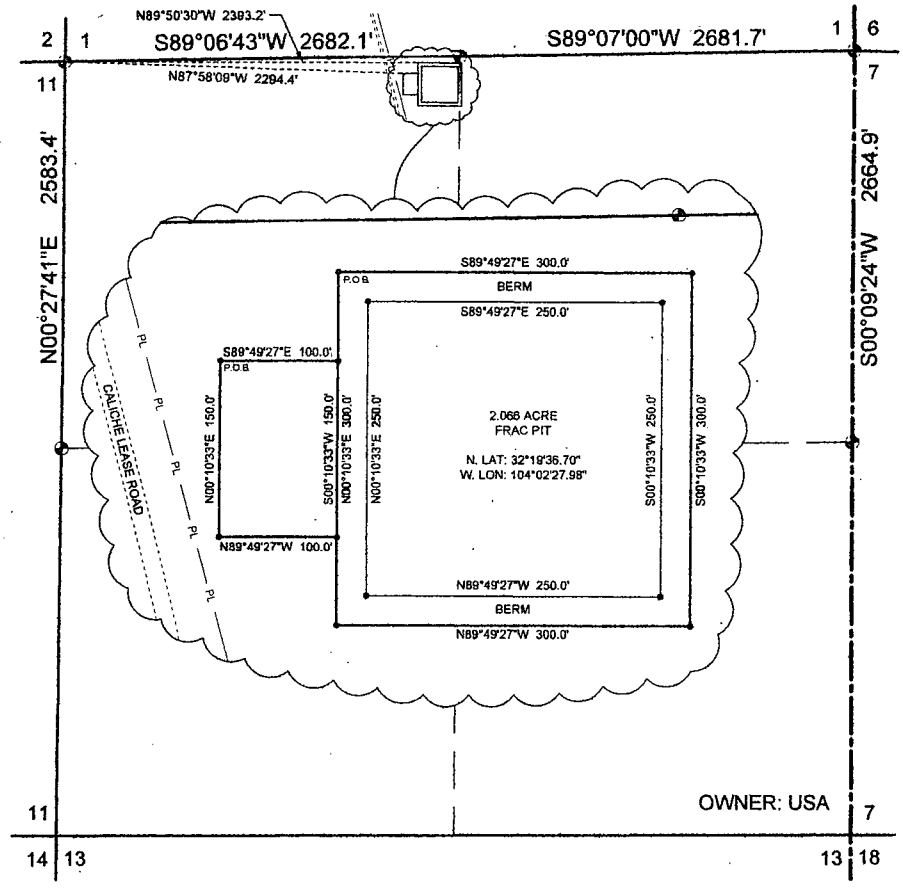
Interim Reclamation & Production Facilities
LONGVIEW FEDERAL 12-13H
V-DOOR EAST



LEGEND

- Well Bore
- Topsoil
- Interim Reclamation
- Berm
- Production Facilities
- NORTH

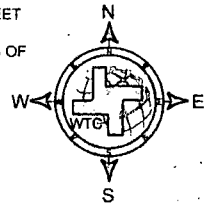
SECTION 12, TOWNSHIP 23 SOUTH, RANGE 28 EAST, N.M.P.M., EDDY CO., NM.



• =1/2" REBAR W/RED PLASTIC CAP
◔ =FND. USGS BRASS CAP

DESCRIPTION OF A PROPOSED FRAC PIT TOTALING 2.066 ACRES, SITUATED IN SECTION 12, TOWNSHIP 23 SOUTH, RANGE 28 EAST, N.M.P.M., EDDY COUNTY, NEW MEXICO AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS;
BEGINNING AT A 1/2" REBAR SET WITH A RED PLASTIC CAP MARKED "TX 1985 NM 14729" (RPC) FOR THE NORTHWEST CORNER OF SAID 2.066 ACRES, FROM WHICH A USGS BRASS CAP FOUND FOR THE COMMON CORNER OF SECTIONS 1-2-11-12, T23S, R28E, BEARS N .89°50'30"W., 2393.2 FEET;
THENCE S.89°49'27"E., 300.0 FEET TO AN RPC SET FOR THE NORTHEAST CORNER; THENCE S.00°10'33"W. 300.0 FEET TO AN RPC SET FOR THE SOUTHEAST CORNER; THENCE N.89°49'27"W., 300.0 FEET TO AN RPC SET FOR THE SOUTHWEST CORNER; THENCE N.00°10'33"E., 300.0 FEET TO THE POINT OF BEGINNING; CONTAINING 2.066 ACRES OF LAND.

DESCRIPTION OF A PROPOSED 150.0 FEET BY 150.0 FEET TURNING AREA, SITUATED IN SECTION 12, TOWNSHIP 23 SOUTH, RANGE 28 EAST, N.M.P.M, EDDY COUNTY, NEW MEXICO AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOW;
BEGINNING AT A 1/2" REBAR SET WITH A RED PLASTIC CAP MARKED "TX 1985 NM 14729" (RPC) FOR THE NORTHWEST CORNER OF SAID 150.0 BY 150.0 FEET TURNING AREA, FROM WHICH A USGS BRASS CAP FOUND FOR THE COMMON CORNER OF SECTIONS 1-2-11-12, T23S, R28E, BEARS N .87°58'09"W., 2294.4 FEET;
THENCE S.89°49'27"E., 100.0 FEET TO AN RPC SET FOR THE NORTHEAST CORNER; THENCE S.00°10'33"W. 150.00 FEET TO AN RPC SET FOR THE SOUTHEAST CORNER; THENCE N.89°49'27"W., 100.00 FEET TO AN RPC SET FOR THE SOUTHWEST CORNER; THENCE N.00°10'33"E., 150.00 FEET TO THE POINT OF BEGINNING; CONTAINING 0.344 ACRES OF LAND.



NOTE:
1. BASIS OF BEARING IS A TRANSVERSE MERCATOR PROJECTION OF THE NEW MEXICO STATE PLANE COORDINATE SYSTEM, EAST ZONE, NAD 83, BASED ON NGS STATION "LOVING", AND DISTANCES ARE OF GRID VALUE.
2. LATITUDE AND LONGITUDE SHOWN IS THE CENTER OF THE FRAC PIT.

1000 0 1000 2000 FEET

I, JAMES E. TOMPKINS, NEW MEXICO PROFESSIONAL SURVEYOR NO. 14729, DO HEREBY CERTIFY THAT THIS PLAT AND THE ACTUAL SURVEY ON THE GROUND UPON WHICH IT IS BASED WERE PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION; THAT I AM RESPONSIBLE FOR THIS SURVEY; THAT THIS SURVEY MEETS THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO; AND THAT IT IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

James E. Tompkins 12/26/2012

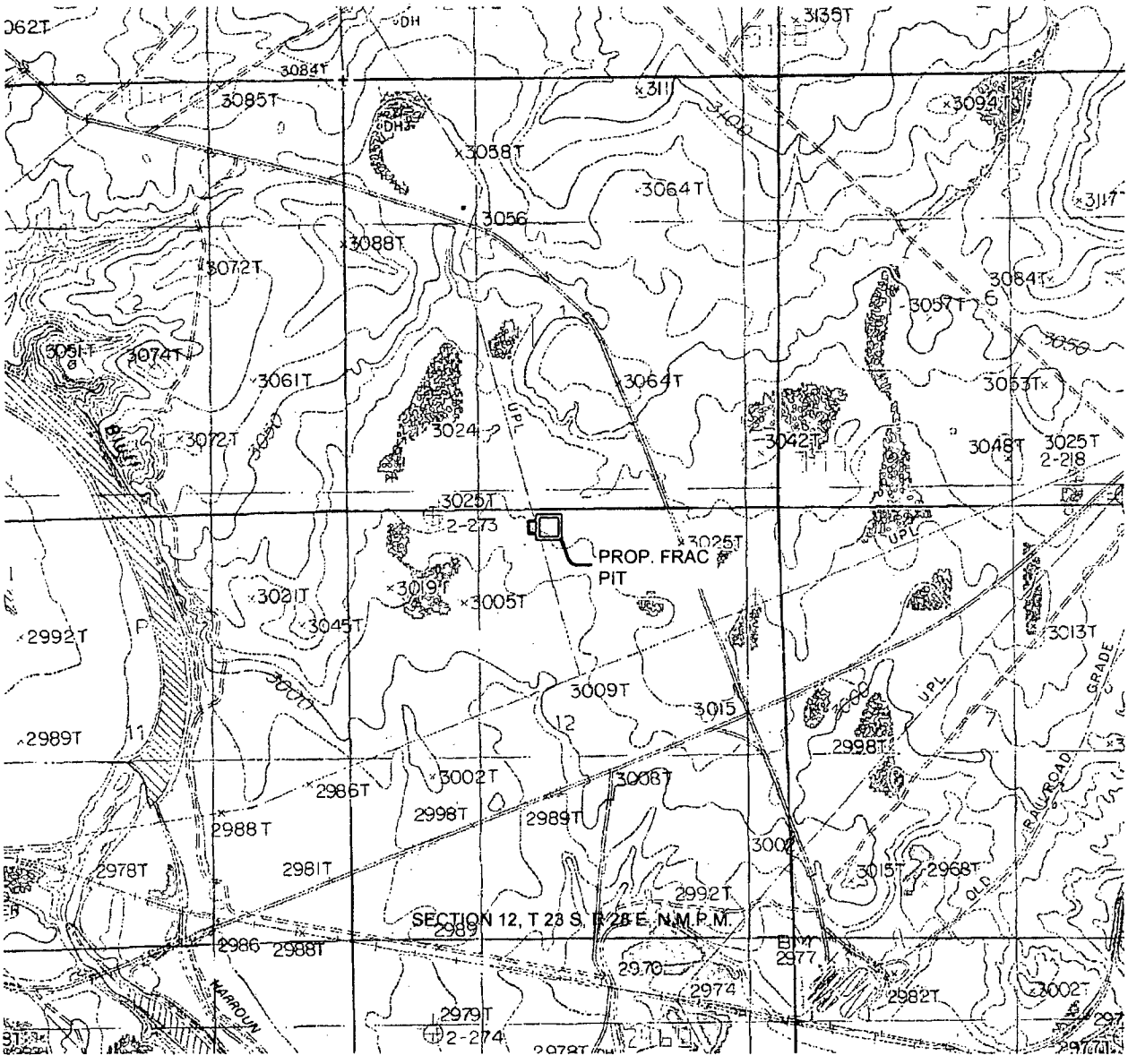
JAMES E. TOMPKINS, N.M. P.L.S. No.14729

SURVEY DATE: 12/10/2012 DRAFT GMY
JOB NO.: 48548 SHEET: 1 OF 1

RKI EXPLORATION & PRODUCTION
PROPOSED FRAC PIT AND TURN AREA
SECTION 12, T23S, R28E, N.M.P.M.,
EDDY COUNTY, NEW MEXICO

WTC Engineers - Surveyors
WEST TEXAS CONSULTANTS, INC.
ENGINEERS PLANNERS SURVEYORS
405 S.W. 1st Street
Andrews, TX 79714
(432) 523-2181

LOCATION VERIFICATION MAP



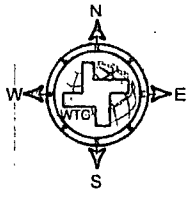
SCALE: 1" = 2000'

SECTION 12, T 23 S, R 28 E, N.M.P.M.

COUNTY: EDDY STATE: NM

DESCRIPTION: FRAC PIT

OPERATOR: RKI EXPLORATION & PRODUCTION



DRIVING DIRECTIONS:

From the intersection of New Mexico State Highway 31 & County Road 605 (US Refinery Road). Go North on County Road 605 for 1.2 miles to lease road left. Go left 0.7 mile along lease road the pit is on the left.

WEST TEXAS CONSULTANTS, INC.
ENGINEERS PLANNERS SURVEYORS
405 S.W. 1st. STREET
ANDREWS, TEXAS 79714
(432) 523-2181

RKI EXPLORATION & PRODUCTION

JOB No.: WTC48820

Z:\Projects\Oil & Gas Surveys\RKI Exploration & Production\48820-RKI Exploration, State & Plat 2 Frac Pits in Sec 38 & Sec 12\Drawings\48820 FRAC PITS.dwg

PECOS DISTRICT
CONDITIONS OF APPROVAL

OPERATOR'S NAME:	RKI EXPLORATION
LEASE NO.:	NM91078
WELL NAME & NO.:	13H-LONGVIEW FEDERAL 12
SURFACE HOLE FOOTAGE:	925'/N. & 440'/W.
BOTTOM HOLE FOOTAGE	330'/N. & 330'/W. (Sec. 1)
LOCATION:	Section 12, T. 23 S., R. 28 E., NMPM
COUNTY:	Eddy County, New Mexico

TABLE OF CONTENTS

Standard Conditions of Approval (COA) apply to this APD. If any deviations to these standards exist or special COAs are required, the section with the deviation or requirement will be checked below.