12-653

HOBBS OCD
JUL 23 2012
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OCD-HOBBS

Form 3160-3
(March 2012)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No: NM053434

6. If Indian, Allotee or Tribe Name:

1a. Type of work: ☑ DRILL ☐ REENTER

7. If Unit or CA Agreement, Name and No.: NM70976B LEA UNIT BONE SPRING

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

8. Lease Name and Well No.: LEA UNIT #31H <302802>

2. Name of Operator: LEGACY RESERVES OPERATING LP <240974>

9. API Well No.: 30-025-40699

3a. Address: P.O. BOX 10848, MIDLAND, TX 79702

3b. Phone No. *(include area code)*: 432-689-5200

10. Field and Pool, or Exploratory: LEA; BONE SPRING <375707>

4. Location of Well *(Report location clearly and in accordance with any State requirements.*)*

At surface: SHL: 330' FNL & 1916' FWL

At proposed prod. zone: BHL: 330' FSL & 1916' FWL

11. Sec., T. R. M. or Blk. and Survey or Area: SEC 13, T20S, R34E

14. Distance in miles and direction from nearest town or post office*

12. County or Parish: LEA

13. State: NM

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

16. No. of acres in lease: ~~440~~ 520

17. Spacing Unit dedicated to this well: 160 ACRES

18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.: SHL: ~850' BHL: ~450'

19. Proposed Depth: PHD: 11,130' 15,304' MD 10,947' TVD

20. BLM/BIA Bond No. on file: NMB000394

21. Elevations (Show whether DF, KDB, RT, GL, etc.): 3651' GL

22. Approximate date work will start*: 08/01/2012

23. Estimated duration: 45 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: D. Patrick Darden

Name *(Printed/Typed)*: D. PATRICK DARDEN, P.E.

Date: 05/02/2012

Title: SENIOR ENGINEER

Approved by *(Signature)*: /s/ Don Peterson

Name *(Printed/Typed)*:

Date: JUL 18 2012

Title: FIELD MANAGER

Office: CARLSBAD FIELD OFFICE

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Conditions of approval, if any, are attached.

APPROVAL FOR TWO YEARS

Title 18 U.S.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)

Capitan Controlled Water Basin

KZ 07/25/12

Approval Subject to General Requirements & Special Stipulations Attached

SEE ATTACHED FOR CONDITIONS OF APPROVAL

JUL 26 2012

APPLICATION TO DRILL

LEA UNIT #31H

LEGACY RESERVES OPERATING, L.P.

SHL: Unit C, Section 13

T20S-R34E, Lea County New Mexico

(REVISED 5/02/12)

12. ***Pressure Control Eqpt/BOP:*** Test BOP per Onshore Order #2

Legacy plans on using a 13-5/8" 5000 psi working pressure BOP system consisting of one set of blind rams and one set of pipe rams and a 5000 psi annular type preventer. A choke manifold and 80 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. A mud gas separator will be available for use if needed.

BOP unit will be hydraulically operated. BOP will be nippled 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 13-3/8" casing through the running of production casing, the well will be equipped with a 5000 psi BOP system.

The BOPs will be tested by an independent service company to 250 psi low and 5000 psi high. The Hydril will be tested to 250 psi low and 2500 psi high.

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

A. Mud logging program: 2 man unit from top of Delaware to TD.
B. Logging is planned from TD of pilot hole up to top of Delaware.
C. No DST's or cores are planned.

14. ***Potential Hazards***

No abnormal pressures or temperatures are expected in the drilling of this well. if H2S is encountered the operator will comply with provisions of Onshore Order 6. Since there will be an H2S Safety package on location, 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 operations of equipment being used. No lost circulation is expected to occur but to be prepared for any Sufficient mud materials will be kept on location at all times in order to combat lost circulation or unexpected kicks. Estimated BHP: 4800 psi, estimated BHT: 130°F.

15. ***Road and Location***

Road and location construction will begin after BLM approval of APD. Anticipated spud date is middle to late July 2012. Drilling expected to take 35-40 days and an additional 7 days for the completion.

16. ***Additional Requirements of Project:***

Completion: The targeted Bone Spring pay zone will be perforated and stimulated by means of acid and hydraulic fracturing in multiple stages. Fresh water used in the completion of this well will be stored in an already existing fresh water frac pond on the lease.

LEGACY RESERVES

LEA UNIT #31H

LOCATION: See Below for SHL & PBHL.

Proposed Wellbore Configuration

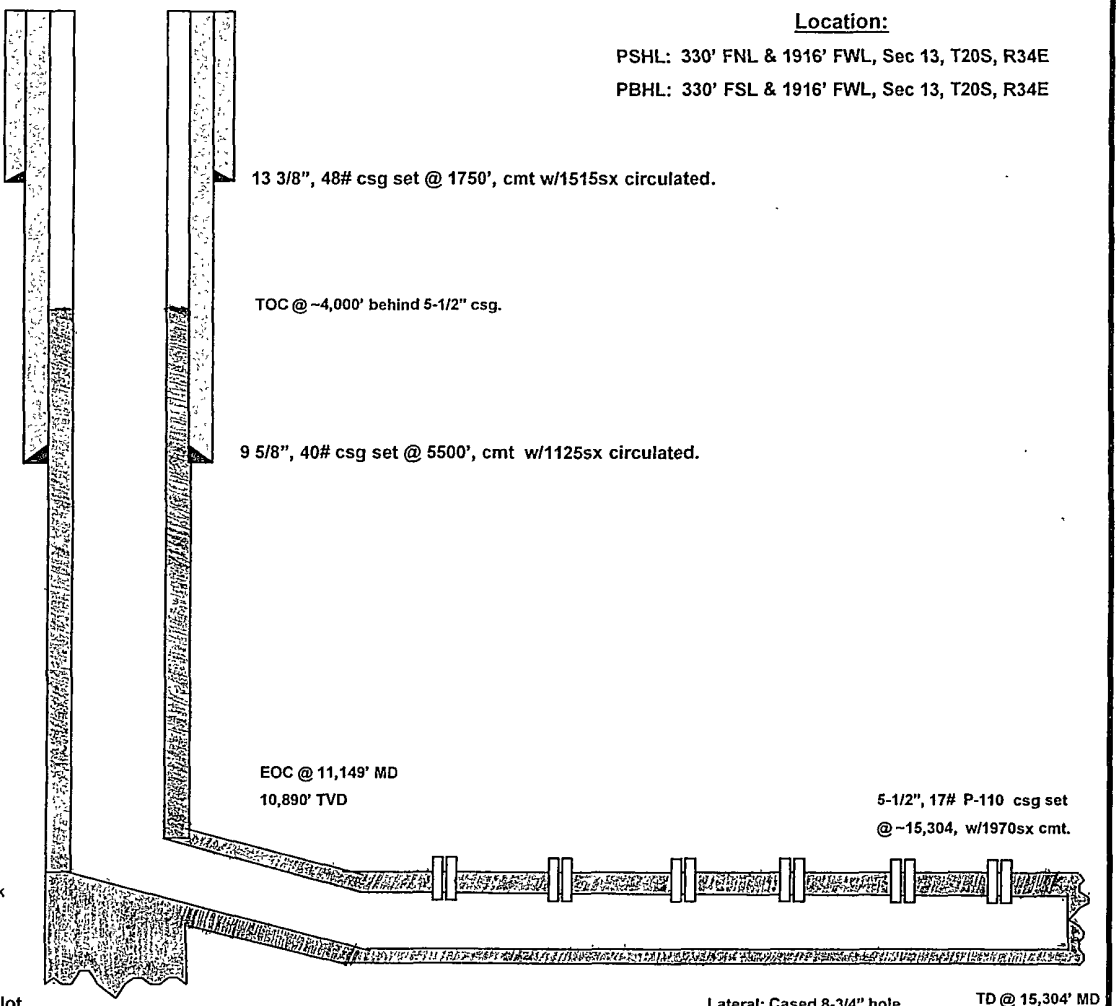
FIELD: Lea (Bone Spring)
COUNTY: Lea
STATE: New Mexico

GL: 3651'
KB:
SPUD DATE: 8/01/12

LATEST UPDATE: 04/27/2012
BY: DP Darden
API No: 30-025-?????

Location:

PSHL: 330' FNL & 1916' FWL, Sec 13, T20S, R34E
PBHL: 330' FSL & 1916' FWL, Sec 13, T20S, R34E



Legacy Reserves Operating LP

Lea County, NM (NAD27 NME)
Lea Unit #31H
Lea Unit #31H

OH

Plan: Plan #1 - 8-3/4" Hole

Standard Planning Report

27 April, 2012

Scientific Drilling
Directional Drilling Operations

Database:	EDM-Regulatory	**Local Co-ordinate Reference:**	Well Lea Unit #31H
Company:	Legacy Reserves Operating LP	**TVD Reference:**	GL @ 3651.00usft (Original Well Elev)
Project:	Lea County, NM (NAD27 NME)	**MD Reference:**	GL @ 3651.00usft (Original Well Elev)
Site:	Lea Unit #31H	**North Reference:**	Grid
Well:	Lea Unit #31H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1 - 8-3/4" Hole		

Project Lea County, NM (NAD27 NME)

Map System:	US State Plane 1927 (Exact solution)	**System Datum:**	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

Site Lea Unit #31H

Site Position:		**Northing:**	575,440.30 usft	**Latitude:**	32° 34' 45 592 N
From:	Map	**Easting:**	751,884 00 usft	**Longitude:**	103° 30' 56 228 W
Position Uncertainty:	0.00 usft	**Slot Radius:**	13-3/16 "	**Grid Convergence:**	0 44 °

Well Lea Unit #31H

Well Position	**+N/-S**	0 00 usft	**Northing:**	575,440 30 usft	**Latitude:**	32° 34' 45.592 N
	+E/-W	0 00 usft	**Easting:**	751,884 00 usft	**Longitude:**	103° 30' 56 228 W
Position Uncertainty		0 00 usft	**Wellhead Elevation:**		**Ground Level:**	0 00 usft

Wellbore OH

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	04/27/12	7 48	60.50	48,749

Design Plan #1 - 8-3/4" Hole

Audit Notes:

Version:		**Phase:**	PLAN	**Tie On Depth:**	0 00

Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0 00	0.00	0 00	179 55

Plan Sections

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0 00	0.00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0.00	
10,425 00	0 00	0 00	10,425 00	0.00	0 00	0 00	0 00	0 00	0.00	
11,149 11	89.21	179 55	10,890 00	-458 65	3 61	12 32	12 32	0 00	179 55	
15,304.18	89.21	179 55	10,947 00	-4,613 20	36 30	0 00	0 00	0 00	0.00	PBHL - Lea Unit #31H

Database:	EDM Regulatory	**Local Co-ordinate Reference:**	Well Lea Unit #31H
Company:	Legacy Reserves Operating LP	**TVD Reference:**	GL @ 3651 00usft (Original Well Elev)
Project:	Lea County, NM (NAD27 NME)	**MD Reference:**	GL @ 3651 00usft (Original Well Elev)
Site:	Lea Unit #31H	**North Reference:**	Grid
Well:	Lea Unit #31H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1 - 8 3/4" Hole		

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)
0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0.00
10,425 00	0 00	0 00	10,425 00	0 00	0 00	0 00	0 00	0 00	0 00
10,500.00	9 24	179.55	10,499.68	-6 03	0 05	6 03	12.32	12 32	0 00
10,600 00	21 56	179 55	10,595.90	-32 54	0 26	32 54	12 32	12.32	0.00
10,700 00	33 88	179 55	10,684.25	-78 97	0 62	78 97	12 32	12 32	0 00
10,800 00	46 20	179 55	10,760.66	-143 17	1 13	143 18	12 32	12 32	0 00
10,900 00	58 52	179 55	10,821 61	-222 21	1 75	222 21	12 32	12.32	0.00
11,000 00	70.84	179 55	10,864 29	-312 43	2 46	312 44	12 32	12 32	0 00
11,100.00	83 16	179 55	10,886 74	-409 67	3 22	409 69	12 32	12.32	0 00
11,149 11	89 21	179 55	10,890.00	-458 65	3 61	458 66	12 32	12 32	0 00
11,200 00	89 21	179 55	10,890.70	-509 53	4 01	509 55	0 00	0 00	0 00
11,300.00	89 21	179 55	10,892 07	-609.52	4 80	609 54	0 00	0 00	0 00
11,400.00	89.21	179 55	10,893 44	-709 51	5 58	709 53	0 00	0 00	0 00
11,500.00	89.21	179 55	10,894.81	-809 50	6.37	809 52	0 00	0 00	0 00
11,600.00	89.21	179 55	10,896.18	-909 48	7 16	909 51	0 00	0 00	0.00
11,700.00	89 21	179 55	10,897.56	-1,009.47	7 94	1,009 50	0 00	0 00	0 00
11,800 00	89.21	179 55	10,898 93	-1,109.46	8 73	1,109 49	0.00	0 00	0 00
11,900 00	89 21	179 55	10,900.30	-1,209 45	9 52	1,209 48	0 00	0 00	0 00
12,000.00	89 21	179.55	10,901 67	-1,309 43	10 30	1,309 48	0 00	0 00	0 00
12,100 00	89 21	179 55	10,903 04	-1,409 42	11 09	1,409.47	0 00	0 00	0.00
12,200 00	89 21	179 55	10,904 42	-1,509.41	11 88	1,509 46	0 00	0 00	0 00
12,300 00	89 21	179 55	10,905 79	-1,609 40	12.66	1,609 45	0 00	0 00	0 00
12,400 00	89 21	179.55	10,907 16	-1,709 38	13 45	1,709 44	0 00	0 00	0 00
12,500 00	89 21	179.55	10,908 53	-1,809 37	14 24	1,809 43	0 00	0 00	0 00
12,600 00	89 21	179.55	10,909 90	-1,909 36	15 02	1,909 42	0 00	0 00	0 00
12,700 00	89 21	179 55	10,911 28	-2,009 35	15 81	2,009 41	0 00	0 00	0 00
12,800 00	89 21	179.55	10,912 65	-2,109 33	16.60	2,109 40	0 00	0.00	0 00
12,900 00	89 21	179 55	10,914 02	-2,209 32	17 38	2,209 39	0 00	0 00	0 00
13,000 00	89 21	179 55	10,915 39	-2,309.31	18 17	2,309 38	0 00	0.00	0 00
13,100.00	89 21	179 55	10,916 76	-2,409 30	18 96	2,409 37	0.00	0 00	0 00
13,200.00	89 21	179 55	10,918.13	-2,509 28	19 74	2,509.36	0 00	0 00	0 00
13,300 00	89 21	179.55	10,919 51	-2,609 27	20.53	2,609.35	0 00	0.00	0 00
13,400 00	89 21	179 55	10,920 88	-2,709 26	21 32	2,709.34	0 00	0 00	0.00
13,500 00	89 21	179.55	10,922 25	-2,809 25	22.11	2,809.33	0 00	0.00	0 00
13,600 00	89 21	179.55	10,923 62	-2,909 23	22 89	2,909 32	0 00	0 00	0.00
13,700 00	89 21	179 55	10,924 99	-3,009.22	23 68	3,009 32	0.00	0 00	0 00
13,800 00	89 21	179 55	10,926 37	-3,109 21	24 47	3,109 31	0 00	0 00	0.00
13,900 00	89 21	179 55	10,927 74	-3,209.20	25 25	3,209 30	0 00	0.00	0.00
14,000 00	89 21	179 55	10,929 11	-3,309 18	26 04	3,309 29	0 00	0 00	0 00
14,100 00	89 21	179 55	10,930 48	-3,409 17	26 83	3,409 28	0 00	0 00	0 00
14,200 00	89 21	179.55	10,931 85	-3,509 16	27 61	3,509 27	0 00	0 00	0 00
14,300 00	89 21	179.55	10,933.22	-3,609 15	28.40	3,609 26	0 00	0 00	0 00
14,400.00	89.21	179.55	10,934 60	-3,709.13	29.19	3,709 25	0 00	0.00	0 00
14,500 00	89.21	179 55	10,935 97	-3,809 12	29 97	3,809 24	0 00	0 00	0 00
14,600 00	89 21	179 55	10,937 34	-3,909 11	30 76	3,909 23	0 00	0 00	0.00
14,700 00	89 21	179 55	10,938 71	-4,009.10	31 55	4,009 22	0 00	0 00	0.00
14,800 00	89 21	179 55	10,940.08	-4,109 08	32 33	4,109 21	0 00	0 00	0.00
14,900 00	89 21	179 55	10,941 46	-4,209 07	33 12	4,209 20	0 00	0 00	0 00
15,000.00	89.21	179 55	10,942 83	-4,309.06	33 91	4,309 19	0 00	0 00	0 00
15,100 00	89 21	179 55	10,944 20	-4,409.05	34 69	4,409 18	0 00	0.00	0.00
15,200 00	89 21	179 55	10,945 57	-4,509 03	35 48	4,509 17	0 00	0 00	0 00
15,300 00	89 21	179 55	10,946 94	-4,609 02	36 27	4,609 16	0 00	0 00	0 00
15,304 18	89 21	179 55	10,947 00	-4,613 20	36 30	4,613 34	0 00	0 00	0 00
PBHL - Lea Unit #31H									

Database:	EDM-Regulatory	**Local Co-ordinate Reference:**	Well Lea Unit #31H
Company:	Legacy Reserves Operating LP	**TVD Reference:**	GL @ 3651 00usft (Original Well Elev)
Project:	Lea County, NM (NAD27 NME)	**MD Reference:**	GL @ 3651 00usft (Original Well Elev)
Site:	Lea Unit #31H	**North Reference:**	Grid
Well:	Lea Unit #31H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1 - 8-3/4" Hole		

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)

Design Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
PBHL - Lea Unit #31H - plan hits target center - Point	0 00	0 00	10,947 00	-4,613 20	36.30	570,827 10	751,920.30	32° 33' 59 942 N	103° 30' 56.218 W

LEGACY RESERVES

Scientific Drilling
Directional Drilling Operations

T G M

Azimuths to Grid North
True North -0 44°
Magnetic North 7 04°

Magnetic Field
Strength 48748 5snT
Dip Angle 60 50°
Date 04/27/2012
Model IGRF2010

To convert a Magnetic Direction to a Grid Direction, Add 7 04°
To convert a True Direction to a Grid Direction, Subtract 0 44°

Lea Unit #31H
Lea County, NM (NAD27 NME)
Northing: (Y) 575440.30
Easting: (X) 751884.00
Plan #1 - 8-3/4" Hole

GL @ 3651 00usft (Original Well E

WELL DETAILS: Lea Unit #31H

Ground Level 0 00

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0 00	0 00	575440 30	751884 00	32° 34' 45 592 N	103° 30' 56 228 W

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	
2	10425 00	0 00	0 00	10425 00	0 00	0 00	0 00	0 00	0 00	
3	11149 11	89 21	179 55	10890 00	-458 65	3 61	12 32	179 55	458 66	
4	15304 18	89 21	179 55	10947 00	-4613 20	36 30	0 00	0 00	4613 34	PBHL - Lea Unit #31H

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
PBHL - Lea Unit #31H - plan hits target center	10947 00	-4613 20	36 30	570827 10	751920 30	32° 33' 59 942 N	103° 30' 56 218 W

SITE DETAILS: Lea Unit #31H

Site Centre Northing 575440 30
Easting 751884 00

Positional Uncertainty 0 00
Convergence 0 44
Local North Grid

PROJECT DETAILS: Lea County, NM (NAD27 NME)

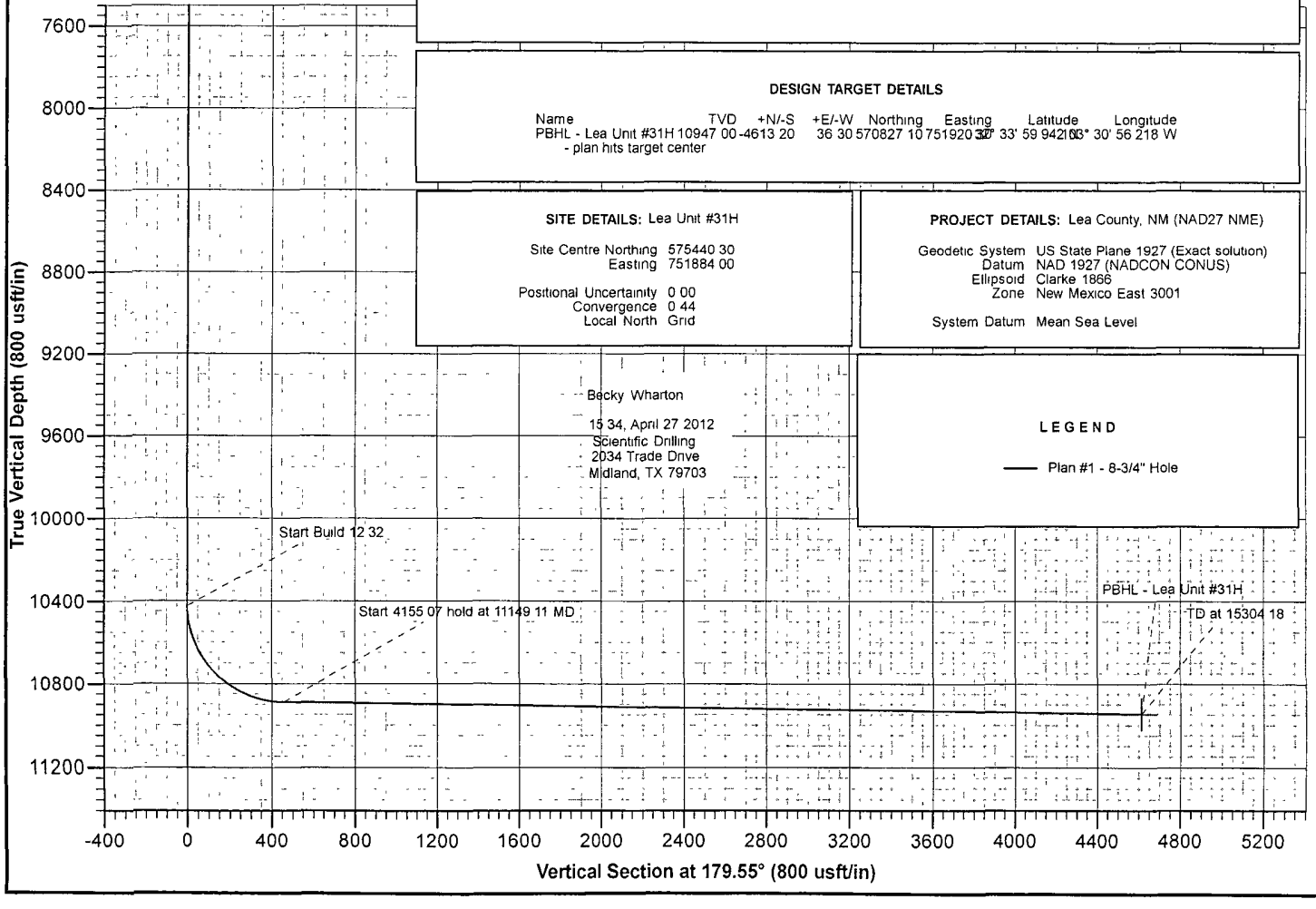
Geodetic System US State Plane 1927 (Exact solution)
Datum NAD 1927 (NADCON CONUS)
Ellipsoid Clarke 1866
Zone New Mexico East 3001

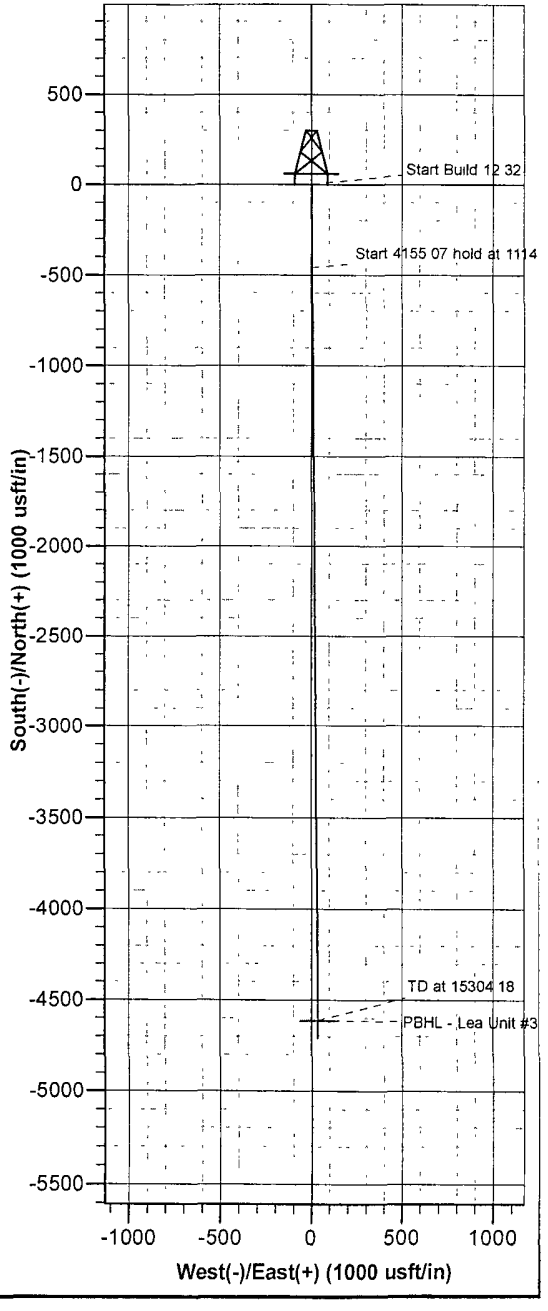
System Datum Mean Sea Level

Becky Wharton
15 34, April 27 2012
Scientific Drilling
2034 Trade Drive
Midland, TX 79703

LEGEND

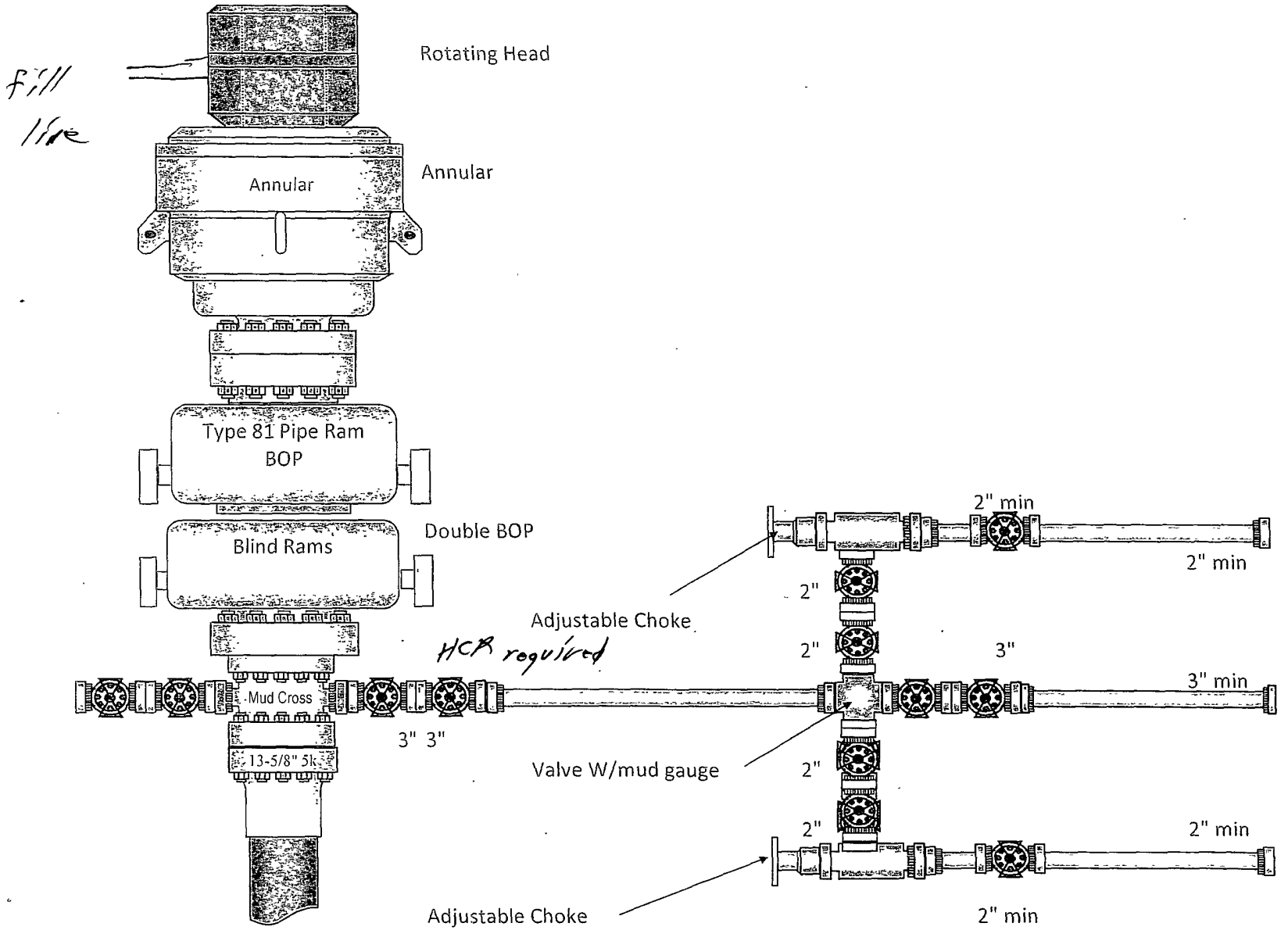
Plan #1 - 8-3/4" Hole





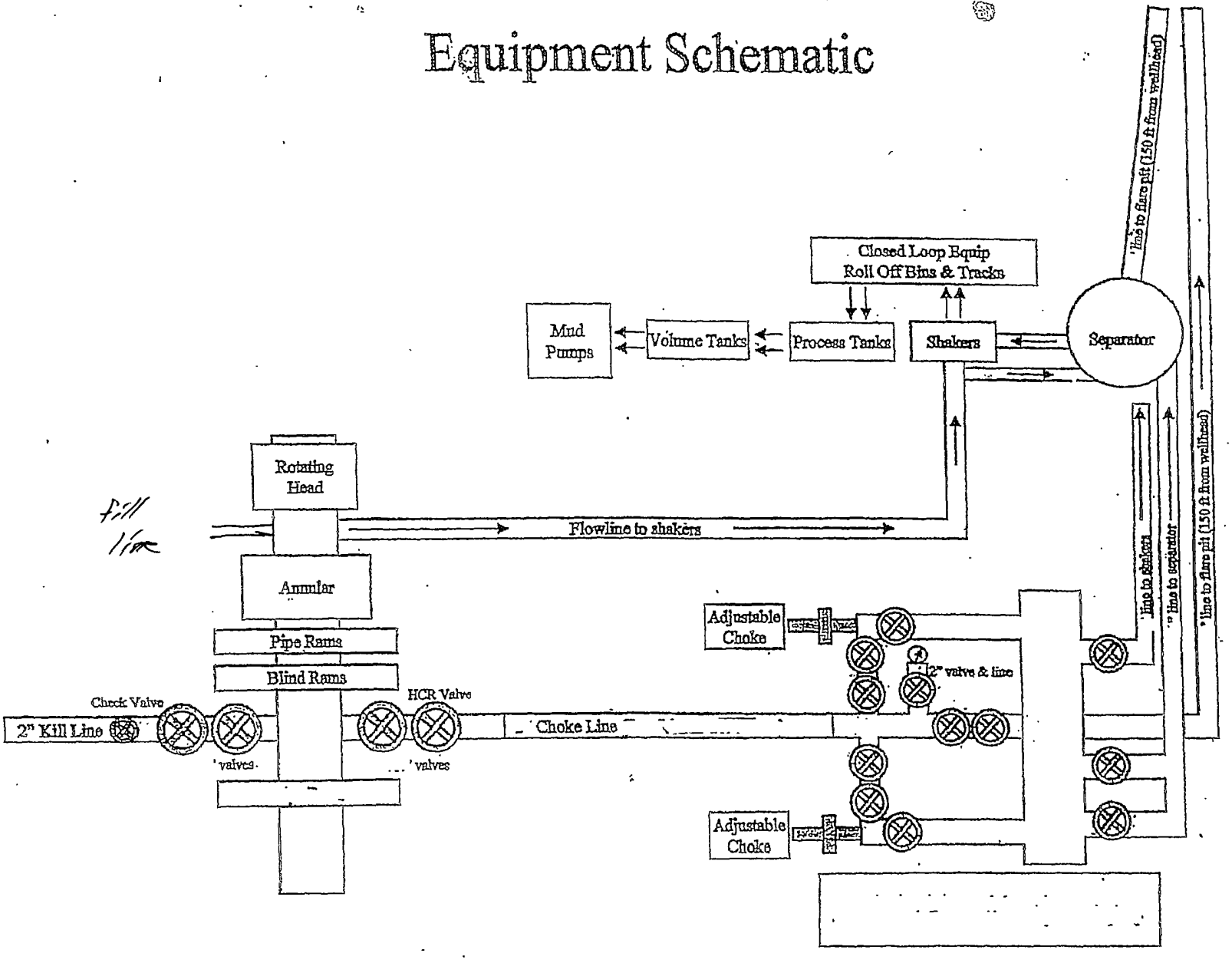
BOP and Choke Manifold Diagrams

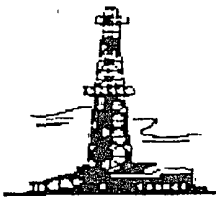
Lea Unit #31H



LEA UNIT #31 H

Equipment Schematic





WESTERN DRILLING, INC.

RIG #6 Inventory

CLASSIFICATION:
National 100-M Modified by National Oilwell to 1,600 HP Imput

DRILLING DEPTH:
17,000'

POWER SYSTEM:
Three (3) Caterpillar D379 engines each with National Torque converters driving a Three (3) engine inline compound

RIG GENERATORS:
Two (2) Caterpillar D3412 engines with 500 KW AC generators

DRAWWORKS:
National 100M Modified by National Oilwell to 1,600 HP Imput with 1-3/8" Lebus grooving
Three (3) Engine Inline Compound
Single Pump Drive (3) Caterpillar 379, 550 HP w/ National/Oilworks C245 Torque Converter
Parmac 60RC hydromatic

MAST:
Lee C. Moore 142' x 21' base, 920,000# Rating

DRILL LINE:
1-3/8" drilling line

SUBSTRUCTURE:
Lee C. Moore Type 21'-9" high substructure, 18'-3" rotary beam clearance to ground level, 24' kelly drive bushing height, 1,000,000# rotary capacity with 500,000# setback capacity

MUD PUMPS:
Two (2) Continental Emsco D-1650 pumps
One (1) Compound Driven, One (1) Driven by 398 rated at 800 HP

ROTARY:
Hacker 27-1/2"

TRAVELING BLOCK:
National 500 Ton Block
BJ 5500 - 500 Ton Hook

SWIVEL:
National N-1324 (500 Ton)

DRILL PIPE:
15,000', 5" Drill pipe, 25.60 E & G, 4-1/2" IF

DRILL COLLARS:
Eighteen (18) - 8" Drill Collars
Twenty-four (24) - 6 1/2" Drill Collars

KELLY:
5-1/4" x 40' Hex

ANNULAR PREVENTER:
Cameron "D" Annulur - 5,000# Rating

RAM PREVENTERS:
Cameron "U" Double 13-5/8 5,000#

ACCUMULATOR SYSTEM:
Koomey six (6) station, 80 gallon capacity with dual air pumps and one (1) electric pump Cameron Station

MUD TANK SYSTEM:
Four (4) tank 1,600 barrel total - BBL Pre-mix pit, Vortex Fluid System Shale Shaker

MUD MIXING PUMPS:
Two (2) 5" x 6" centrifugal pumps, each driven by 60 HP electric motors

AUXILIARY EQUIPMENT:
One (1) Tool Pusher Quarters
Two (2) 500 BBL Water Tanks
One (1) Automatic Driller
Two (2) Air Hoists
One (1) Drilling Recorder

LEA UNIT #31H

H2S Drilling Operations Plan

April 2012

TABLE OF CONTENTS

D. Respirator Use
E. Emergency Rescue

H_2S CONTINGENCY PLAN SECTION

Scope:

This contingency plan provides an organized plan of action for alerting and protecting the public within an area of exposure prior to an intentional release, or following the accidental release of a potentially hazardous volume of hydrogen sulfide. The plan establishes guidelines for all personnel whose work activity may involve exposure to Hydrogen Sulfide Gas (H_2S).

Objective:

Prevent any and all accidents, and prevent the uncontrolled release of H_2S into the atmosphere.

Provide proper evacuation procedures to cope with emergencies.

Provide immediate and adequate medical attention should an injury occur.

Discussion of Plan:

Suspected Problem Zones:

Implementation: This plan, with all details, is to be fully implemented 1000' before drilling into the first sour zone.

Emergency Response Procedure: This section outlines the conditions and denotes steps to be taken in the event of an emergency.

Emergency Equipment and Procedure: This section outlines the safety and emergency equipment that will be required for the drilling of this well.

Training Provisions: This section outlines the training provisions that must be adhered to 1000' before drilling into the first sour zone.

Emergency call lists: Included are the telephone numbers of all persons that would need to be contacted, should an H2S emergency occur.

Briefing: This section deals with the briefing of all persons involved with the drilling of this well.

Public Safety: Public Safety Personnel will be made aware of the drilling of this well.

Check Lists: Status check lists and procedural check lists have been included to ensure adherence to the plan.

General Information: A general information section has been included to supply support information.

EMERGECY PROCEDURES SECTION

I. In the event of any evidence of H_2S level above 10 ppm, take the following steps immediately:

A. Secure breathing apparatus.

B. Order non-essential personnel out of the danger zone.

C. Take steps to determine if the H_2S level can be corrected or suppressed, and if so, proceed with normal operations.

II. If uncontrollable conditions occur, proceed with the following:

A. Take steps to protect and/or remove any public downwind of the rig, including partial evacuation or isolation. Notify necessary public safety personnel and the New Mexico Oil & Gas of the situation.

B. Remove all personnel to the Safe Briefing Area.

C. Notify public safety personnel for help with maintaining roadblocks and implementing evacuation.

D. Determine and proceed with the best possible plan to regain control of the well. Maintain tight security and safety measures.

III. Responsibility:

A. The Company Approved Supervisor shall be responsible for the total implementation of the plan.

B. The Company Approved Supervisor shall be in complete command during any emergency.

C. The Company Approved Supervisor shall designate a back up Supervisor in the event that he/she is not available.

EMERGENCY PROCEDURE IMPLEMENTATION

I. Drilling or Tripping

A. All Personnel

1. When alarm sounds, don escape unit and report to upwind Safe Briefing Area.
2. Check status of other personnel (buddy system).
3. Secure breathing apparatus.
4. Wait for orders from supervisor.

B. Drilling Foreman

1. Report to the upwind Safe Briefing Area.
2. Don Breathing Apparatus and return to the point of release with the Tool Pusher or Driller (buddy system).
3. Determine the concentration of H_2S.
4. Assess the situation and take appropriate control measures.

C. Tool Pusher

1. Report to the upwind Safe Briefing Area.
2. Don breathing apparatus and return to the point of release with the Drilling Foreman or the Driller (buddy system).
3. Determine the concentration.
4. Assess the situation and take appropriate control measures.

D. Driller

1. Check the status of other personnel (in a rescue attempt, always use the buddy system).
2. Assign the least essential person to notify the Drilling Foreman and Tool Pusher, in the event of their absence.

3. Assume the responsibility of the Drilling Foreman and the Tool Pusher until they arrive, in the event of their absence.

E. Derrick Man and Floor Hands

1. Remain in the upwind Safe Briefing Area until otherwise instructed by a supervisor.

F. Mud Engineer

1. Report to the upwind Safe Briefing Area.

2. When instructed, begin check of mud for pH level and H_2S level.

G. Safety Personnel

1. Don Breathing Apparatus.

2. Check status of all personnel.

3. Wait for instructions from Drilling Foreman or Tool Pusher.

II. Taking a Kick

A. All personnel report to the upwind Safe Briefing Area.

B. Follow standard BOP procedures.

III. Open Hole Logging

A. All unnecessary personnel should leave the rig floor.

B. Drilling Foreman and Safety Personnel should monitor the conditions and make necessary safety equipment recommendations.

IV. Running Casing or Plugging

A. Follow "Drilling or Tripping" procedures.

B. Assure that all personnel have access to protective equipment.

SIMULATED BLOWOUT CONTROL DRILLS

All drills will be initiated by activating alarm devices (air horn). One long blast, on the air horn, for ACTUAL and SIMULATED Blowout Control Drills. This operation will be performed by the Drilling Foreman or Tool Pusher at least one time per week for each of the following conditions, with each crew:

Drill # 1 Bottom Drilling

Drill # 2 Tripping Drill Pipe

In each of these drills, the initial reaction time to shutting in the well shall be timed as well as the total time for the crew to complete its entire pit drill assignment. The times must be recorded on the IADC Driller's Log as "Blowout Control Drill".

Drill No.:		
Reaction Time to Shut-In:	minutes,	seconds.
Total Time to Complete Assignment:	minutes,	seconds.

I. Drill Overviews

A. Drill No. 1- Bottom Drilling

1. Sound the alarm immediately.
2. Stop the rotary and hoist kelly joint above the rotary table.
3. Stop the circulatory pump.
4. Close the drill pipe rams.
5. Record casing and drill pipe shut-in pressures and pit volume increases.

B. Drill No. 2 – Tripping Drill Pipe

1. Sound the alarm immediately.
2. Position the upper tool joint just above the rotary table and set the slips.

3. Install a full opening valve or inside blowout preventor tool in order to close the drill pipe.

4. Close the drill pipe rams.

5. Record the shut-in annular pressure.

II. Crew Assignments

A. Drill No. 1 – Bottom Drilling

1. Driller

   a) Stop the rotary and hoist kelly joint above the rotary table.

   b) Stop the circulatory pump.

   c) Check flow.

   d) If flowing, sound the alarm immediately.

   e) Record the shut-in drill pipe pressure.

   f) Determine the mud weight increase needed or other courses of action.

2. Derrickman

   a) Open choke line valve at BOP.

   b) Signal Floor Man # 1 at accumulator that choke line is open.

   c) Close choke and upstream valve after pipe tams have been closed.

   d) Read the shut-in annular pressure and report readings to Driller.

3. Floor Man # 1

   a) Close the pipe rams after receiving the signal from the Derrickman.

   b) Report to Driller for further instructions.

4. Floor Man # 2

a) Notify the Tool Pusher and Operator Representative of the H_2S alarms.

b) Check for open fires and, if safe to do so, extinguish them.

c) Stop all welding operations.

d) Turn-off all non-explosion proof lights and instruments.

e) Report to Driller for further instructions.

5. Tool Pusher

a) Report to the rig floor.

b) Have a meeting with all crews.

c) Compile and summarize all information.

d) Calculate the proper kill weight.

e) Ensure that proper well procedures are put into action.

6. Operator Representative

a) Notify the Drilling Superintendent.

b) Determine if an emergency exists and if so, activate the contingency plan.

B. Drill No. 2 – Tripping Pipe

1. Driller

a) Sound the alarm immediately when mud volume increase has been detected.

b) Position the upper tool joint just above the rotary table and set slips.

c) Install a full opening valve or inside blowout preventor tool to close the drill pipe.

d) Check flow.

e) Record all data reported by the crew.

f) Determine the course of action.

2. Derrickman

   a) Come down out of derrick.

   b) Notify Tool Pusher and Operator Representative.

   c) Check for open fires and, if safe to do so, extinguish them.

   d) Stop all welding operations.

   e) Report to Driller for further instructions.

3. Floor Man # 1

   a) Pick up full opening valve or inside blowout preventor tool and stab into tool joint above rotary table (with Floor Man # 2).

   b) Tighten valve with back-up tongs.

   c) Close pipe rams after signal from Floor Man # 2.

   d) Read accumulator pressure and check for possible high pressure fluid leaks in valves or piping.

   e) Report to Driller for further instructions.

4. Floor Man # 2

   a) Pick-up full opening valve or inside blowout preventor tool and stab into tool joint above rotary table (with Floor Man # 1).

   b) Position back-up tongs on drill pipe.

   c) Open choke line valve at BOP.

   d) Signal Floor Man # 1 at accumulator that choke line is open.

   e) Close choke and upstream valve after pipe rams have been closed.

   f) Check for leaks on BOP stack and choke manifold.

   g) Read annular pressure.

h) Report readings to the Driller.

5. Tool Pusher

a) Report to the rig floor.

b) Have a meeting with all of the crews.

c) Compile and summarize all information.

d) See that proper well kill procedures are put into action.

6. Operator Representative

a) Notify Drilling Superintendent

b) Determine if an emergency exists, and if so, activate the contingency plan.

IGNITION PROCEDURES

Responsibility:

The decision to ignite the well is the responsibility of the DRILLING FOREMAN in concurrence with the STATE POLICE. In the event the Drilling Foreman is incapacitated, it becomes the responsibility of the RIG TOOL PUSHER. This decision should be made only as a last resort and in a situation where it is clear that:

1. Human life and property are endangered.

2. There is no hope of controlling the blowout under the prevailing conditions.

If time permits, notify the main office, but do not delay if human life is in danger. Initiate the first phase of the evacuation plan.

Instructions for Igniting the Well:

1. Two people are required for the actual igniting operation. Both men must wear self-contained breathing apparatus and must use a full body harness and attach a retrievable safety line to the D-Ring in the back. One man must monitor the atmosphere for explosive gases with the LEL monitor, while the Drilling Foreman is responsible for igniting the well.

2. The primary method to ignite is a 25mm flare gun with a range of approximately 500 feet.

3. Ignite from upwind and do not approach any closer than is warranted.

4. Select the ignition site best suited for protection and which offers an easy escape route.

5. Before igniting, check for the presence of combustible gases.

6. After igniting, continue emergency actions and procedures as before.

7. All unassigned personnel will limit their actions to those directed by the Drilling Foreman.

NOTE: After the well is ignited, burning Hydrogen Sulfide will convert to Sulfur Dioxide, which is also highly toxic. Do not assume the area is safe after the well is ignited.

TRAINING PROGRAM

When working in an area where Hydrogen Sulfide (H_2S) might be encountered, definite training requirements must be carried out. The Company Supervisor will ensure that all personnel, at the well site, have had adequate training in the following:

1. Hazards and Characteristics of Hydrogen Sulfide.
2. Physicals effects of Hydrogen Sulfide on the human body.
3. Toxicity of Hydrogen Sulfide and Sulfur Dioxide.
4. H_2S detection, emergency alarm and sensor location.
5. Emergency rescue.
6. Resuscitators.
7. First aid and artificial resuscitation.
8. The effects of Hydrogen Sulfide on metals.
9. Location safety.

Service company personnel and visiting personnel must be notified if the zone contains H_2S, and each service company must provide adequate training and equipment for their employees before they arrive at the well site.

EMERGENCY EQUIPMENT REQUIREMENTS

Lease Entrance Sign:

Should be located at the lease entrance with the following information:

CAUTION-POTENTIAL POISON GAS
HYDROGEN SULFIDE
NO ADMITTANCE WITHOUT AUTHORIZATION

Respiratory Equipment:

- Fresh air breathing equipment should be placed at the safe briefing areas and should include the following:
- Two SCBA's at each briefing area.

Windsocks or Wind Streamers:

- A minimum of two 10" windsocks located at strategic locations so that they may be seen from any point on location.
- Wind streamers (if preferred) should be placed at various locations on the well site to ensure wind consciousness at all times. (Corners of location).

Hydrogen Sulfide Detector and Alarms:

- 1-Three channel H_2S monitor with alarms.
- Three (3) sensors located as follows: # 1 – Rig Floor, # 2 – Bell Nipple, # 3 – Mud Pits

Well Condition Sign and Flags:

The Well Condition Sign w/flags should be placed a minimum of 150' before you enter the location. It should have three (3) color coded flags (green, yellow and red) that will be used to denote the following location conditions:

GREEN – Normal Operating Conditions
YELLOW – Potential Danger
RED – Danger, H2S Gas Present

Auxiliary Rescue Equipment:

- Stretcher (drilling contractor)
- 2 – 100' Rescue lines (drilling contractor)
- First Aid Kit properly stocked. (drilling contractor)

Mud Inspection Equipment:

Garret Gas Train or Hach Tester for inspection of Hydrogen Sulfide in the drilling mud system.

Fire Extinguishers:

Adequate fire extinguishers shall be located at strategic locations.

Blowout Preventor:

- The well shall have hydraulic BOP equipment for the anticipated BHP.
- The BOP should be tested upon installation.
- BOP, Choke Line and Kill Line will be tested as specified by Operator.

Confined Space Monitor:

There should be a portable multi-gas monitor with at least 3 sensors (O_2, LEL & H2S). This instrument should be used to test the atmosphere of any confined space before entering. It should also be used for atmospheric testing for LEL gas before beginning any type of Hot Work. Proper calibration documentation will need to be provided.

Communication Equipment:

- Proper communication equipment such as cell phones or 2 – way radios should be available at the rig.
- Radio communication shall be available for communication between the company man's trailer, rig floor and the tool pusher's trailer.
- Communication equipment shall be available on the vehicles.

Special Control Equipment:

- Hydraulic BOP equipment with remote control on the ground.
- Rotating head at the surface casing point.

Evacuation Plan:

- Evacuation routes should be established prior to spudding the well.
- Should be discussed with all rig personnel.

Designated Areas:

Parking and Visitor area:

- All vehicles are to be parked at a pre-determined safe distance from the wellhead.
- Designated smoking area.

Safe Briefing Areas:

- Two Safe Briefing Areas shall be designated on either side of the location at the maximum allowable distance from the well bore so they offset prevailing winds or they are at a 180 degree angle if wind directions tend to shift in the area.
- Personal protective equipment should be stored at both briefing areas or if a moveable cascade trailer is used, it should be kept upwind of existing winds. When wind is from the prevailing direction, both briefing areas should be accessible.

NOTE:

- Additional equipment will be available at the nearest TOTAL SAFETY U.S.Office.
- Additional personal H_2S monitors are available for all employees on location.
- Automatic Flare Igniters are recommended for installation on the rig.

CHECK LISTS

Status Check List

Note: Date each item as they are implemented.

1. Sign at location entrance. _____
2. Two (2) wind socks (in required locations). _____
3. Wind Streamers (if required). _____
4. SCBA's on location for all rig personnel and mud loggers. _____
5. Air packs, inspected and ready for use. _____
6. Spare bottles for each air pack (if required). _____
7. Cascade system for refilling air bottles. _____
8. Cascade system and hose line hook up. _____
9. Choke manifold hooked-up and tested. (Before drilling out surface casing.) _____
10. Remote Hydraulic BOP control (hooked-up and tested before drilling out surface casing). _____
11. BOP tested (before drilling out surface casing). _____
12. Mud engineer on location with equipment to test mud for H_2S. _____
13. Safe Briefing Areas set-up. _____
14. Well Condition sign and flags on location and ready. _____
15. Hydrogen Sulfide detection system hooked-up & tested. _____
16. Hydrogen Sulfide alarm system hooked-up & tested. _____
17. Stretcher on location at Safe Briefing Area. _____
18. 2-100' Life Lines on location. _____

19. 1-20# Fire Extinguisher in safety trailer. _____

20. Confined Space Monitor on location and tested. _____

21. All rig crews and supervisor trained (as required). _____

22. Access restricted for unauthorized personnel. _____

23. Drills on H_2S and well control procedures. _____

24. All outside service contractors advised of potential H_2S on the well. _____

25. NO SMOKING sign posted.

26. H_2S Detector Pump w/tubes on location. _____

27. 25mm Flare Gun on location w/flares. _____

28. Automatic Flare Ignitor installed on rig. _____

Procedural Check List

Perform the following on each tour:

1. Check fire extinguishers to see that they have the proper charge.

2. Check Breathing equipment to insure that they have not been tampered with.

3. Check pressure on the supply air bottles to make sure they are capable of recharging.

4. Make sure all of the Hydrogen Sulfide detection systems are operative.

Perform the following each week:

1. Check each piece of breathing equipment to make sure that they are fully charged and operational. This requires that the air cylinder be opened and the mask assembly be put on and tested to make sure that the regulators and masks are properly working. Negative and Positive pressure should be conducted on all masks.

2. BOP skills.

3. Check supply pressure on BOP accumulator stand-by source.

4. Check all breathing air mask assemblies to see that straps are loosened and turned back, ready to use.

5. Check pressure on cascade air cylinders to make sure they are fully charged and ready to use for refill purposes if necessary.

6. Check all cascade system regulators to make sure they work properly.

7. Perform breathing drills with on-site personnel.

8. Check the following supplies for availability:

   - Stretcher
   - Safety Belts and ropes.
   - Spare air bottles.
   - Spare oxygen bottles (if resuscitator required).
   - Gas Detector Pump and tubes.
   - Emergency telephone lists.

9. Test the Confined Space Monitor to verify the batteries are good and that the unit is in good working condition and has been properly calibrated according to manufacturer's recommendations.

BRIEFING PROCEDURES

The following scheduled briefings will be held to ensure the effective drilling and operation of this project:

Pre-Spud Meeting

Date: Prior to spudding the well.
Attendance: Drilling Supervisor
Drilling Engineer
Drilling Foreman
Rig Tool Pushers
Rig Drillers
Mud Engineer
All Safety Personnel
Key Service Company Personnel

Purpose: Review and discuss the well program, step-by-step, to insure complete understanding of assignments and responsibilities.

EVACUATION PLAN

General Plan

The direct lines of action prepared by TOTAL SAFETY U.S., to protect the public from hazardous gas situations are as follows:

1. When the company approved supervisor (Drilling Foremen, Tool Pusher or Driller) determine that Hydrogen Sulfide gas cannot be limited to the well location, and the public will be involved, he will activate the evacuation plan. Escape routes are noted on the Area Map.

2. Company safety personnel or designee will notify the appropriate local government agency that a hazardous condition exists and evacuation need to be implemented.

3. Company approved safety personnel that have been trained in the use of the proper emergency equipment will be utilized.

4. Law enforcement personnel (State Police, Local Police Department, Fire Department, and the Sheriff's Department) will be called to aid in setting up and maintaining road blocks. Also, they will aid in evacuation of the public if necessary.

NOTE: Law enforcement personnel will not be asked to come into a contaminated area. Their assistance will be limited to uncontaminated areas. Constant radio contact will be maintained with them.

5. After the discharge of gas has been controlled, "Company" safety personnel will determine when the area is safe for re-entry.

See Emergency Action Plan

Emergency Assistance Telephone List

PUBLIC SAFETY:	*911 or*
Lea County Sheriff or Police	(575) 396-3611
Fire Department	(575) 397-9308
Hospital	(575) 492-5000
Ambulance	911
Department of Public Safety	(392) 392-5588
Oil Conservation Division	(575) 748-1823
New Mexico Natural Resource	(575) 748-1283

LEGACY RESERVES OPERATING, LP	
Legacy Reserves Operating LP	Office (432)-689-5200
Drilling Manager: Mike Parish	Office (432)689-5200 Cell (432)664-2150
Senior Engineer: Patrick Darden	Office (432)689-5200 Cell (432)296-0070
Production Manager: Ernie Hanson	Office (432)689-5200 Cell (432)230-9009
Executive Vice President of Operations Paul Horne	Office (432)689-5200
Safety Coordinator Randy Williams	Office (432) 689-5200 Cell (432) 260-5566

Drilling Contractor

Unknown at this time. This will be in drilling prognosis and will be provided to the BLM when a drilling contract is executed.

TOTAL SAFETY U.S. *Hobbs (575) 392-2973*

The geologic zones that will be encountered during drilling are known to contain hazardous quantities of H_2S. The accompanying map illustrates the affected areas of the community. The residents within this radius will be notified via a hand delivered written notice describing the activities, potential hazards, conditions of evacuation, evacuation drill siren alarms and other precautionary measures.

Evacuee Description:
Residents: THERE ARE NO RESIDENTS WITHIN 3000' ROE.

Notification Process:

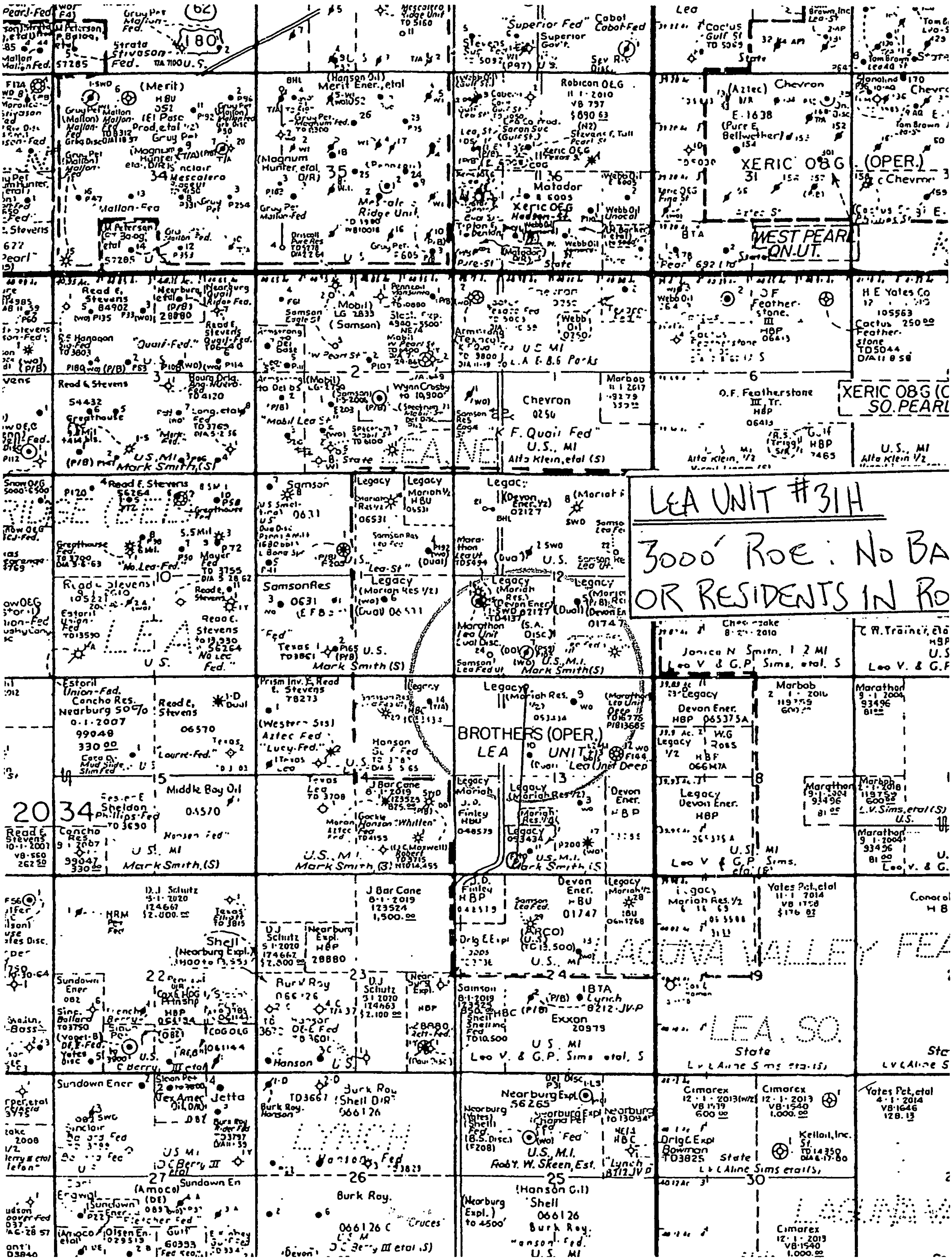
A continuos siren audible to all residence will be activated, signaling evacuation of previously notified and informed residents.

Evacuation Plan:
All evacuees will migrate lateral to the wind direction.

The Oil Company will identify all home bound or highly susceptible individuals and make special evacuation preparations, interfacing with the local and emergency medical service as necessary.

MAPS AND PLATS

See attached map showing 3000' ROE clarification.


LEA UNIT #31H
3000' ROE: NO BA
OR RESIDENTS IN RO
XERIC O&G (OPER.)
WEST PEARL QN-UT.
XERIC O&G (C
SO. PEARL
BROTHERS (OPER.)
LEA UNIT
Mescalero Ridge Unit
Mark Smith (S)
Leo V. & G.P. Sims, etal, S
LEA SO.
State
Chevron
Legacy
Samson Res
Devon Ener.
Marathon
Cimarex
Nearburg Expl.
Burk Roy.
Hanson Fed
Sundown Ener
U.S. MI

Operator – Landowner Agreement

Company: Legacy Reserves Operating, LP

Proposed Well: Lea Unit #31H

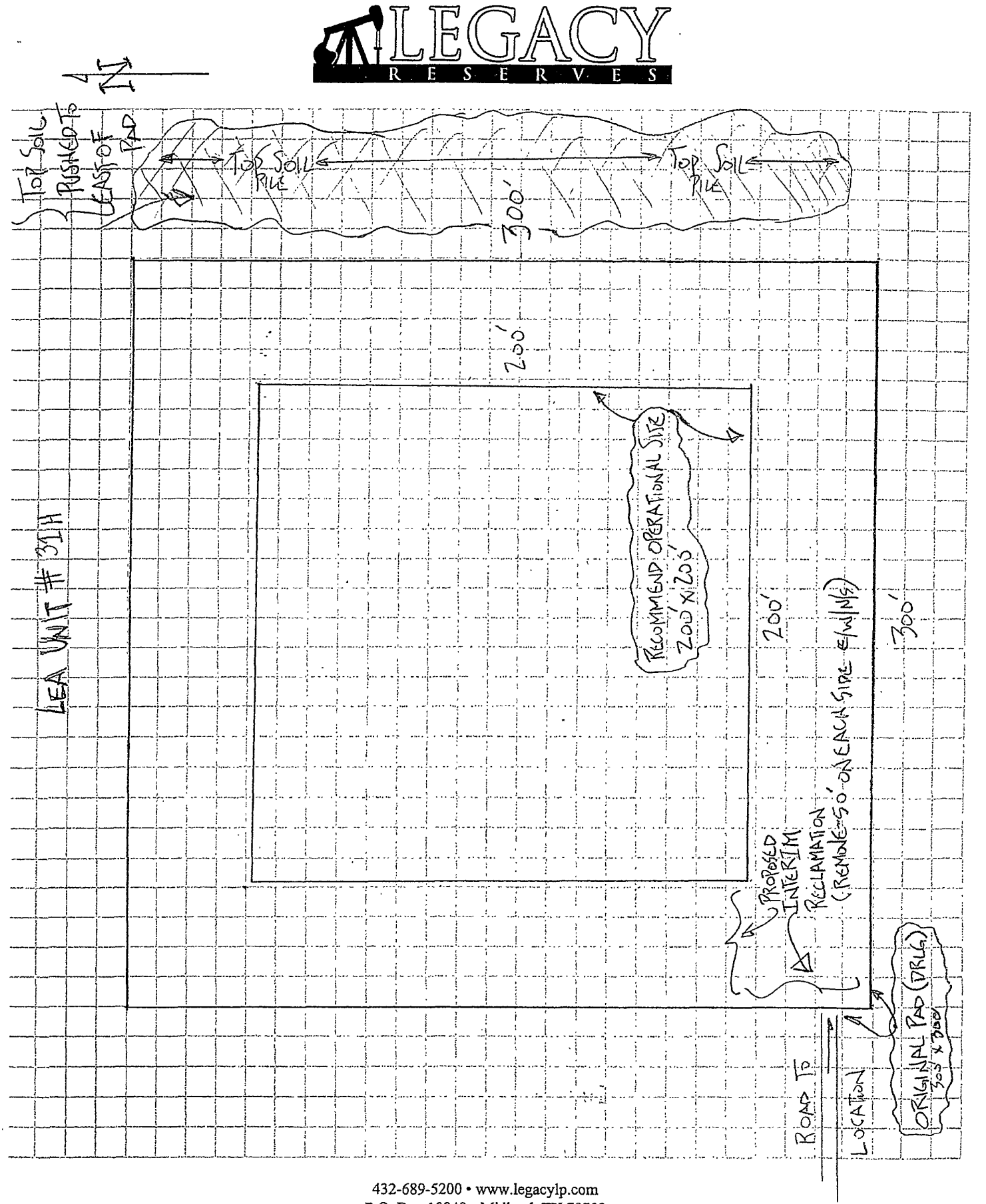
Federal Lease Number: SHL NM-053434, BHL NM-053434

This is to advise that Legacy Reserves Operating LP has an agreement with: Kenneth Smith Inc. 267 Ranch Road Hobbs NM 88240, the surface owner, concerning entry and, surface restoration after completion of drilling operations at the above described well.

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

May 02, 2012
Date

Signature
Matt Sears
Landman



432-689-5200 • www.legacylp.com
P.O. Box 10848 • Midland, TX 79702
NASDAQ: LGCY

APPLICATION TO DRILL

LEA UNIT #31H

LEGACY RESERVES OPERATING, L.P.

SHL: Unit C, Section 13

T20S-R34E, Lea County New Mexico

(REVISED 5/02/12)

To satisfy requirements of Onshore Oil and Gas Order No. 1, Legacy Reserves Operating, L.P. submits the following for your consideration:

1. ***Location:*** SHL: 330' FNL & 1916' FWL, Sec 13, T20S-R34E
   BHL: 330' FSL & 1916' FWL, Sec 13, T20S-R34E

2. ***Elevations:*** 3,651' GL
   3,675' KB

3. ***Geological Name of Surface Formation:*** Quaternery Alluvium Deposits

4. ***Drilling Tools and Associated Eqpt:*** Rotary Drilling Rig using fluid as a means for removal of solid cuttings from the well.

5. ***Proposed Drilling Depth:*** 15,304' MD 10,947' TVD

6. ***Estimated Tops of Geological Markers:***

Rustler	1,600'	Queen	4,620'
Top Salt	1,960'	Delaware	5,150'
Bottom Salt	3,400'	Bone Spring	8,150'
Yates	3,450'	Wolfcamp	11,000'
Seven Rivers/Capitan	3,650'		

7. ***Possible mineral bearing formation:***
   Bone Spring Oil. Delaware Oil. Fresh Water ~125'.

8. ***Proposed Mud System:***

Depth	Mud Wt.	Visc	Fluid Loss	Type Mud
0' to 1750'	8.4-8.6	30-32	May lose circ	FW gel spud mud
1750' to 5500'	~~8.4-8.6~~ 10-10.2	28-29	May lose circ	Brine Water
5500' to 11,130'	8.4-9.4	28-29	NC	FW & brine, use hi-vis sweeps to clean hole
10,418' to 15,303'	9	28-29	NC	Brine

per operator 5/15/12 mm

See COA (Capitan Reef)

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

APPLICATION TO DRILL

LEA UNIT #31H

LEGACY RESERVES OPERATING, L.P.

SHL: Unit C, Section 13

T20S-R34E, Lea County New Mexico

(REVISED 7/12/12 Surf & Intrmd Csg)

9. ***Proposed Drilling Plan:***

Set surface and intermediate casing and cement to surface. Drill pilot hole to ~11,130' and log well. PB pilot hole to ~10,'425 w/715 sxs class H cmt + 0.2% R-3 (16.5 ppg, 1.05 cfps, 4.25 gps wtr - 30% excess), set whipstock & drill 8-3/4" hole to TD of 15,303'. Set 5-1/2" casing from surface to TD (15,303'). Cement 5-1/2" production casing back up into intermediate casing to ~4,000'. See COA

10. ***Casing Information:***

String	Hole size	Depth	Casing OD	Collar	Weight	Grade
Surf	17-1/2"	0' to 1,750' MD	New 13-3/8"	STC	54.5# & 61#	J-55
Int.	12-1/4"	0' to 4,000' MD	New 9-5/8"	LTC	40#	J-55
Int.	12-1/4"	4,000' to 5,500' MD	New 9-5/8"	LTC	40#	HCK-55
Prod	8-3/4"	0' to 15,304' MD	New 5-1/2"	LTC	17#	P-110

5-1/2", P-110:

Collapse Factor:	1.125
Burst Factor:	1.125
Tension Factor:	1.60

11. ***Cementing Information:***

Surface Casing (100% excess on lead & 100% excess on tail):

Lead: 1115 sxs class C cmt + 4% bentonite + 0.25 pps cello flakes + 0.005 gps FP-6L + 2% calcium chloride (13.50 ppg, 1.75 cfps, 9.16 gps wtr).

Tail: 400 sxs class C cmt + 0.005 gps FP-6L + 0.5% calcium chloride (14.80 ppg, 1.33 cfps, 6.33 gps wtr).

Intermediate Casing (50% excess on lead & 20% excess on tail):

Lead: 800 sxs (50:50) poz (fly ash) class C cmt + 10% bentonite + 5% sodium chloride + 0.25 pps cello flakes + 0.1% FL-52A + 0.005 gps FP-6L (11.90 ppg, 2.37 cf/sx, 13.52 gps wtr).

Tail: 325 sxs class C cmt + 0.2% R-3 + 0.005 gps FP-6L (14.80 ppg, 1.33 cfps, 6.31 gps wtr).

Production Casing (25% excess on lead & 25% excess on tail):

See COA

Lead: 760 sxs (50:50) poz (fly ash) class H cmt + 6% bentonite + 5% sodium chloride + 5 pps LCM-1 + 0.7% sodium metasilicate + 0.5% R-21 + 0.45% FL-52A + 0.005 gps FP-6L (11.90 ppg, 2.31 cf/sx, 12.60 gps wtr).

Tail: 1210 sxs (15:61:11) poz (fly ash) class C cmt CSE-2 + 4% sodium chloride + 3 pps LCM-1 + 0.6% FL-25 + 0.6 FL-52A + 0.2% sodium metasilicate + 0.15% R-21 + 0.005 gps FP-6L (13.20 ppg, 1.63 cf/sx, 7.98 gps wtr).

Western Drilling Rig # 6

Mouse hole: 5'-7" east (15" hole, 12' - 15' deep, 2-1/2 degrees)

Rat hole: 7'-7" east and 12'-1" right (15" hole, 30' deep, 7 degrees)

LEA UNIT # 31H

H_2S PLAN SCHEMATIC