

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. NMLC-065478 B
1b. Type of Well: <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name
2. Name of Operator Lime Rock Resources IIA, L.P.		7. If Unit or CA Agreement, Name and No.
3a. Address 1111 Bagby St., Suite 4600 Houston, TX 77002		8. Lease Name and Well No. Falcon 3 J Federal, Well No. 29 [309044]
3b. Phone No. (include area code) 712-292-9526		9. API Well No. 30-015-40108
4. Location of Well (Report location clearly and in accordance with any State requirements *) At surface 1950' FSL & 1775' FEL At proposed prod. zone same		10. Field and Pool, or Exploratory Red Lake; Queen-Grayburg-SA [51360]
14. Distance in miles and direction from nearest town or post office* 12 miles E. of Artesia, NM		11. Sec., T. R. M. or Blk and Survey or Area Sec. 3-T18S-R27E
15. Distance from proposed* location to nearest property or lease line, ft (Also to nearest drig. unit line, if any) 1775' 330'	16. No. of acres in lease 642.88	17. Spacing Unit dedicated to this well 40
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft 330'	19. Proposed Depth 4,500'	20. BLM/BIA Bond No. on file NMB-000797
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3526' GL	22. Approximate date work will start* 01/30/2012	23. Estimated duration 2-3 weeks

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, shall be attached to this form:

- | | |
|--|--|
| 1. Well plat certified by a registered surveyor. | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above). |
| 2. A Drilling Plan. | 5. Operator certification |
| 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office) | 6. Such other site specific information and/or plans as may be required by the authorized officer. |

25. Signature <i>George R. Smith</i>	Name (Printed/Typed) George R. Smith	Date 11/28/2011
Title POA agent for Lime Rock Resources IIA, L.P.		

Approved by (Signature) /s/ James A. Amos	Name (Printed/Typed)	Date MAR 19 2012
Title FIELD MANAGER	Office CARLSBAD FIELD OFFICE	

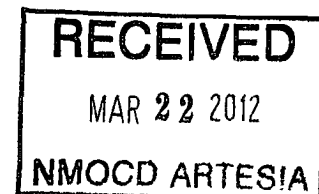
Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.
Conditions of approval, if any, are attached.

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.

*(Instructions on page 2)

Roswell Controlled Water Basin

Approval Subject to General Requirements
& Special Stipulations AttachedSEE ATTACHED FOR
CONDITIONS OF APPROVAL

DISTRICT I
1625 N. FRENCH DR., HOBBS, NM 88240

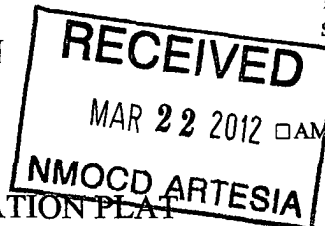
DISTRICT II
1301 W. GRAND AVENUE, ARTESIA, NM 88210

DISTRICT III
1000 RIO BRAZOS RD., AZTEC, NM 87410

DISTRICT IV
11885 S. ST. FRANCIS DR., SANTA FE, NM 87505

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 July 16, 2010
Submit to Appropriate
District Office



WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-015-40108	Pool Code 51300	Pool Name Red Lake; Queen-Grayburg-SA
Property Code 309044	Property Name FALCON 3 J FEDERAL	Well Number 29
OGRID No. 277558	Operator Name LIME ROCK RESOURCES A, L.P.	Elevation 3526'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
J	3	18-S	27-E		1950	SOUTH	1775	EAST	EDDY

Bottom Hole Location If Different From Surface

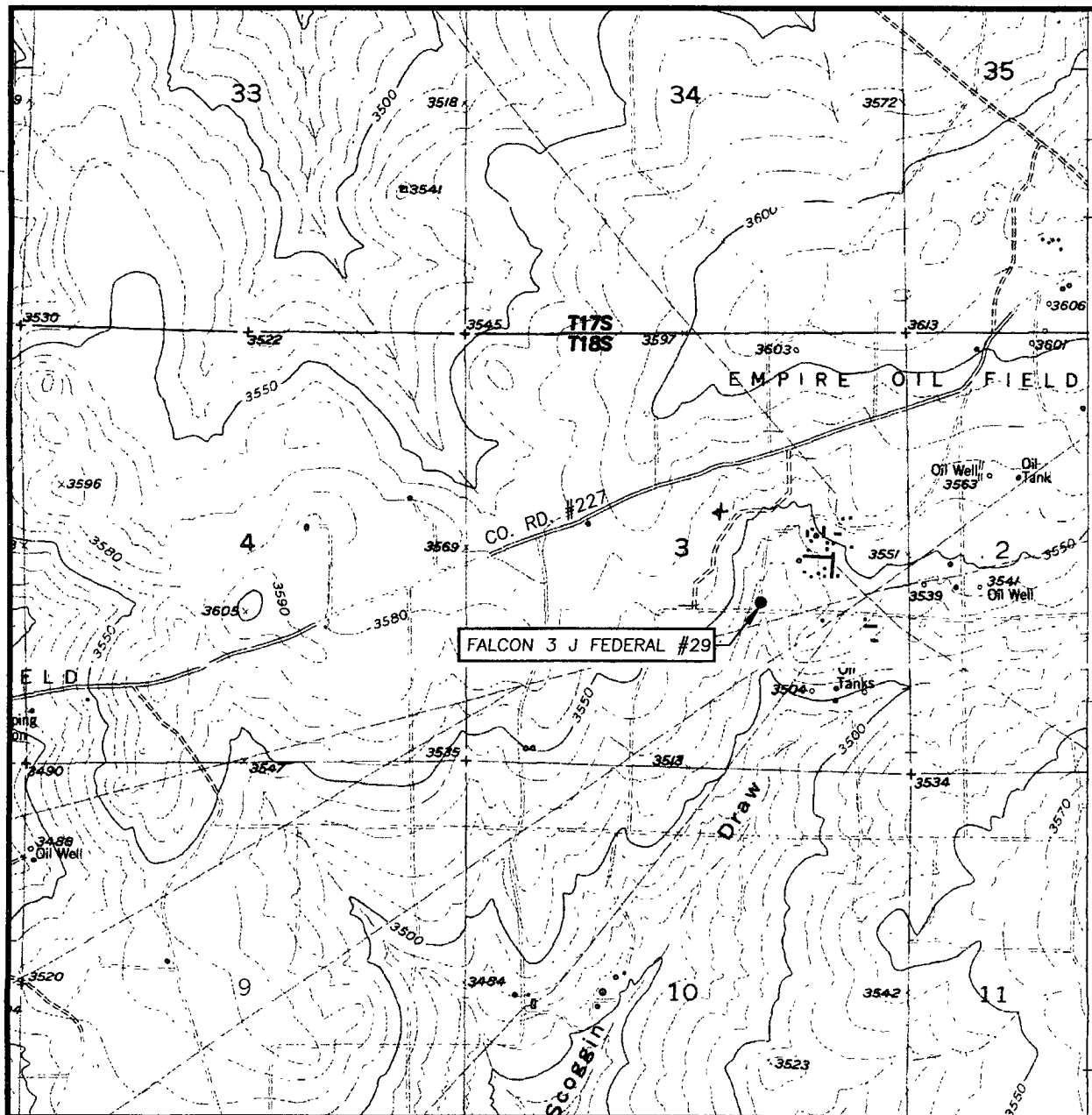
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

Dedicated Acres 40	Joint or Infill	Consolidation Code	Order No.
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per operator 1/25/11
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

<p>GEODETIC COORDINATES NAD 27 NME Y=645507.5 N X=521610.6 E LAT.=32.774572' N LONG.=104.263023' W</p> <p>Survey measurements: 3551.5', 3532.1', 1775', 3534.9', 3531.9', 600', 600', 1950'</p>	OPERATOR CERTIFICATION <i>I hereby certify that the information 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 mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</i> Signature: <u>George R. Smith</u> Date: <u>11/28/11</u> Printed Name: <u>George R. Smith, POA agent</u> E-mail Address: _____
	SURVEYOR CERTIFICATION <i>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.</i> APRIL 13, 2011 Date of Survey Signature & Seal of Professional Surveyor: Certificate Number: <u>3239</u> Gary C. Eidson 12641 LA JWSC W.O.: 11.11 0824

LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL:
SPRING LAKE, N.M. - 10'

SEC. 3 TWP. 18-S RGE. 27-E

SURVEY _____ N.M.P.M.

COUNTY EDDY STATE NEW MEXICO

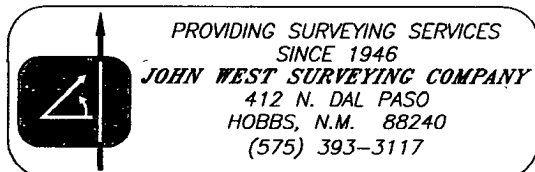
DESCRIPTION 1950' FSL & 1775' FEL

ELEVATION 3526'

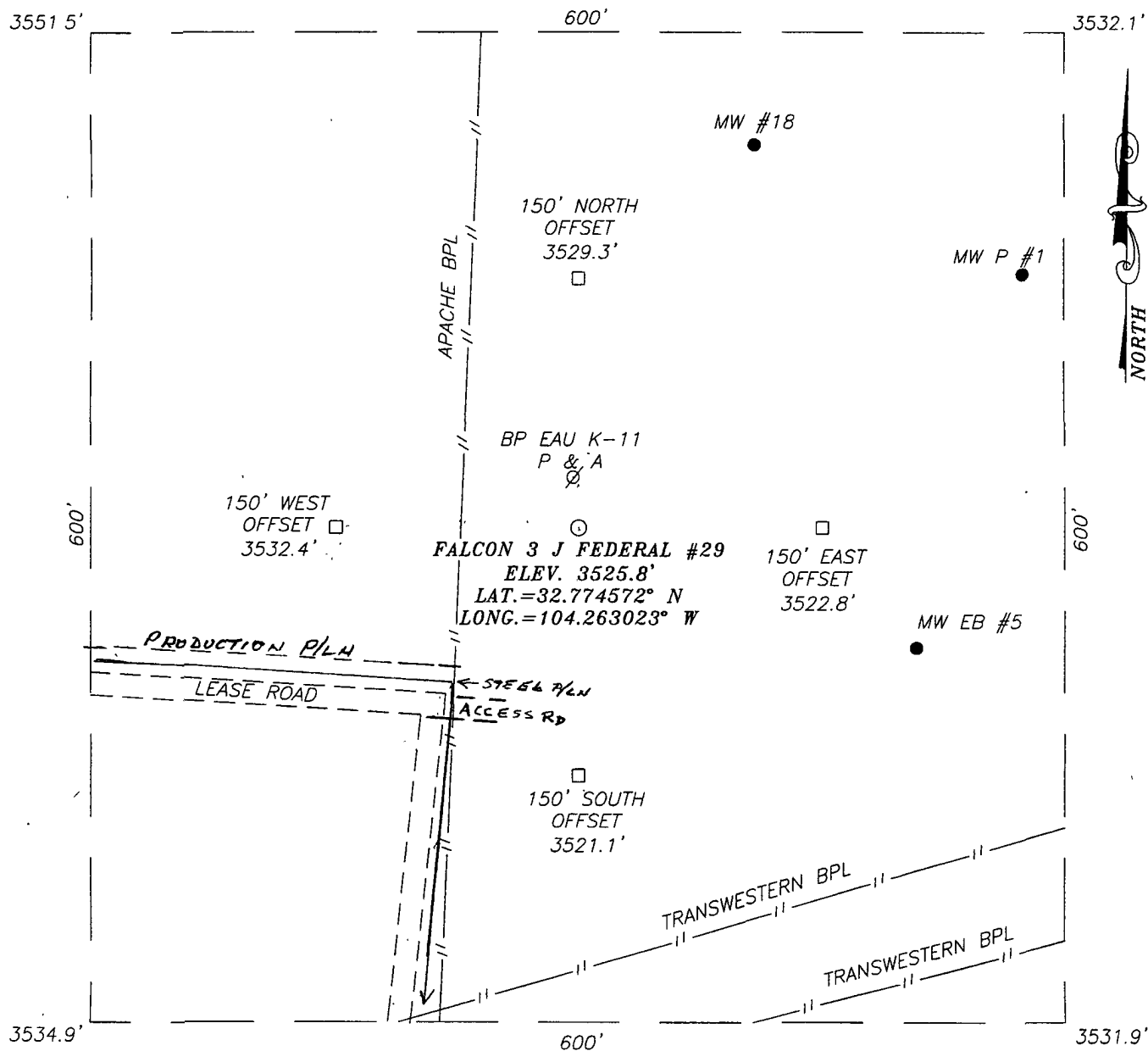
OPERATOR LIME ROCK
RESOURCES A, L.P.

LEASE FALCON 3 J FEDERAL

U.S.G.S. TOPOGRAPHIC MAP
SPRING LAKE, N.M.

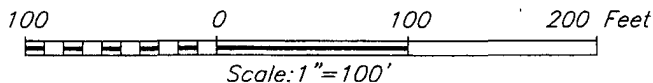


SECTION 3, TOWNSHIP 18 SOUTH, RANGE 27 EAST, N.M.P.M.
EDDY COUNTY NEW MEXICO



DIRECTIONS TO LOCATION

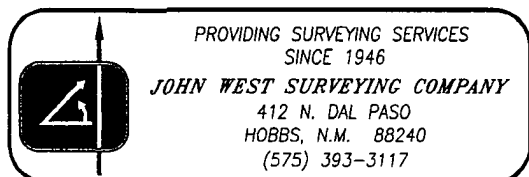
FROM THE INTERSECTION OF CO. RD. #225 (EMPIRE RD) AND CO. RD. #227 (LITTLE DIAMOND RD), GO SOUTHWEST ON CO. RD. #227 APPROX. 4.5 MILES. TURN LEFT AND GO SOUTHWEST APPROX. 0.4 MILES. TURN LEFT AND GO EAST APPROX. 0.2 MILES TO THE LOCATION



LIME ROCK RESOURCES A, L.P.

FALCON 3 J FEDERAL #29 WELL
LOCATED 1950 FEET FROM THE SOUTH LINE
AND 1775 FEET FROM THE EAST LINE OF SECTION 8,
TOWNSHIP 18 SOUTH, RANGE 27 EAST, N.M.P.M.,
EDDY COUNTY, NEW MEXICO

Survey Date: 4/13/11	Sheet 1 of 1 Sheets
W.O. Number: 11.11.0824	Dr. By: LA
Date: 4/29/11	Rel. W.O.: 11110824
	Scale: 1"=100'



PROVIDING SURVEYING SERVICES
SINCE 1946
JOHN WEST SURVEYING COMPANY
412 N. DAL PASO
HOBBS, N.M. 88240
(575) 393-3117

APPLICATION FOR DRILLING
LIME ROCK RESOURCES IIA, L.P.
Falcon 3 J Federal, Well No. 29
1950' FSL & 1775' FEL, Sec. 3-T18S-R27E
Eddy County, New Mexico
Lease No.: NMLC-065478-B
(Development Well)

In conjunction with Form 3160-3, Application for Permit to Drill subject well, Lime Rock Resources IIA, L.P. submits the following items of pertinent information in accordance with BLM requirements:

1. The geologic surface formation is recent Permian with quaternary alluvium and other surficial deposits.

2. The estimated tops of geologic markers are as follows:

Yates	96'	San Andres	1598'
Seven Rivers	326	Glorieta	3,030'
Queen	896'	Yeso	3,154'
Grayburg	1,386'	TD	4,500'

3. The estimated depths at which water, oil or gas formations are anticipated to be encountered:

Water: Surface water possible in the Triassic between 80' - 230'.

Oil: Possible in the San Andres, Glorieta below 1,600'

Gas: Possible in the San Andres, Glorieta below 1,600'

4. Proposed New Casing Program:

HOLE SIZE	CASING SIZE	WEIGHT	GRADE	JOINT	SETTING DEPTH FACTOR	COLLAPSE DESIGN FACTOR	BURST DESIGN FACTOR	TENSION DESIGN FACTOR
12 1/4"	8 5/8"	24.0#	J-55	ST&C	375'	1.2	1.18	2.0
7 7/8"	5 1/2"	17.0#	J-55	LT&C	4,500'	1.2	1.18	2.0

5. Proposed Control Equipment: A 2M Shaffer Type E Double Gate 10" BOP will be installed on the 8 5/8" casing. Casing and BOP will be tested as a 2M system as per Onshore Oil & Gas Order #2 before drilling out with the 7 7/8". The Pipe Rams will be operated and checked daily, plus each time drill pipe is out of hole. This will be documented on driller's log. See Exhibit "E".

6. Cement Program

CASING	SETTING DEPTH	QUANTITY OF CEMENT	TOC	YEILD
8 5/8"		Lead: 175 sx "C"+2%CaCl2+.125pps Poly-E Flake		1.35
	375'	Tail: 200 sx "C" +2% CaCl2 150% excess	Surface	1.32
5 1/2"	4,500'	Lead: 450 sx 35:65 (Poz:C)+.6% Gel + 0.125 pps PE Flake +3pps NaCl+3 pps Gilsonite + 0.5% Halad 9		1.87
		Tail: 550 sx "C"+0.4% LAP-1+ 0.5% CFR-3, .+ 0.25 pps D-AIR +0.125 pps Poly E Flake 100% excess	Surface	1.33

7. Mud Program:

MUD PROGRAM		MUD WEIGHT	VIS.	W/L CONTROL
DEPTH	MUD			
0 – 375'	Fresh water mud:	8.4 – 9.2 ppg	28 - 34	No W/L control
375' – 3000'	Brine water	10.0 – 12.0 ppg	28 - 29	No W/L control
3000' – 4500'	Brine, Salt Gel, Starch	9.8 – 10.2 ppg	30 - 32	W/L control 20-30 cc w/starch

8. Auxiliary Equipment: Blowout Preventer, gas detector, Kelly cock.

9. Testing, Logging, and Coring Program: *see COA*
 Drill Stem Tests: None planned unless warranted.
 Logging: T.D –Surface Casing: GR-DLL, GR-CND
 375' to surface: G/R/Neutron
 Coring: None planned unless warranted.

10. No abnormal pressures or temperatures are anticipated. In the event abnormal pressures are encountered the proposed mud program will be modified to increase the mud weight. Estimated Surface Pressure = 1584 psi (evac. hole) and BHP of 2574 psi (evac) with temperature of 105°.

11. H₂S. The mud log unit will be cautioned to use a gas trap to detect H₂S and if any is detected the mud weight will be increased along with H₂S inhibitors sufficient to control the gas. H₂S monitoring equipment will be installed before drilling out from the 8 5/8" casing. ~~If H₂S is detected in concentrations requiring activation of the contingency program,~~ a mud separator and flare line will be installed on the choke manifold and the H₂S gas contingency program will , not only be activated, but enforced .See Exhibit "D". *see COA*

12. Anticipated starting date: January 25, 2012.
 Anticipated completion of drilling operations: Approx. 3 weeks

2000 psi System

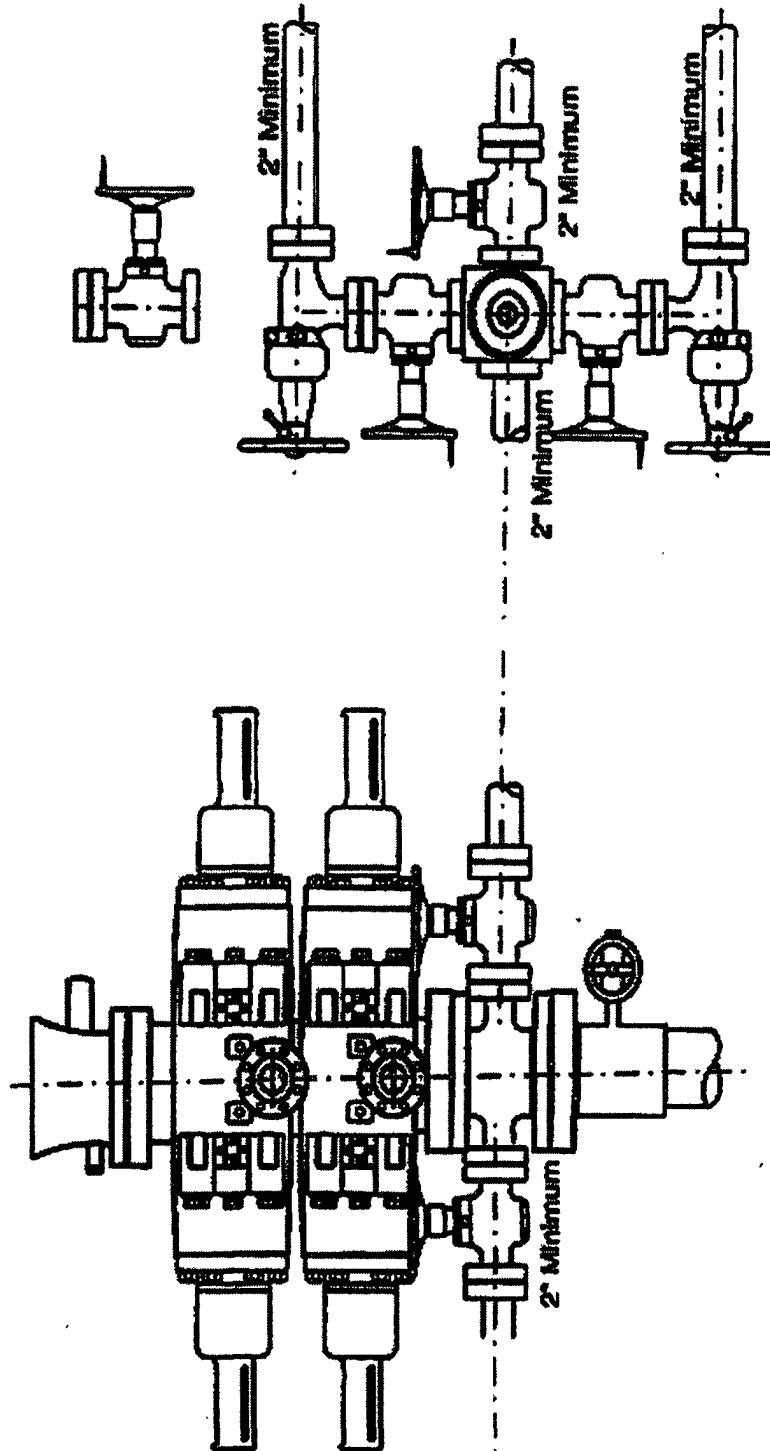
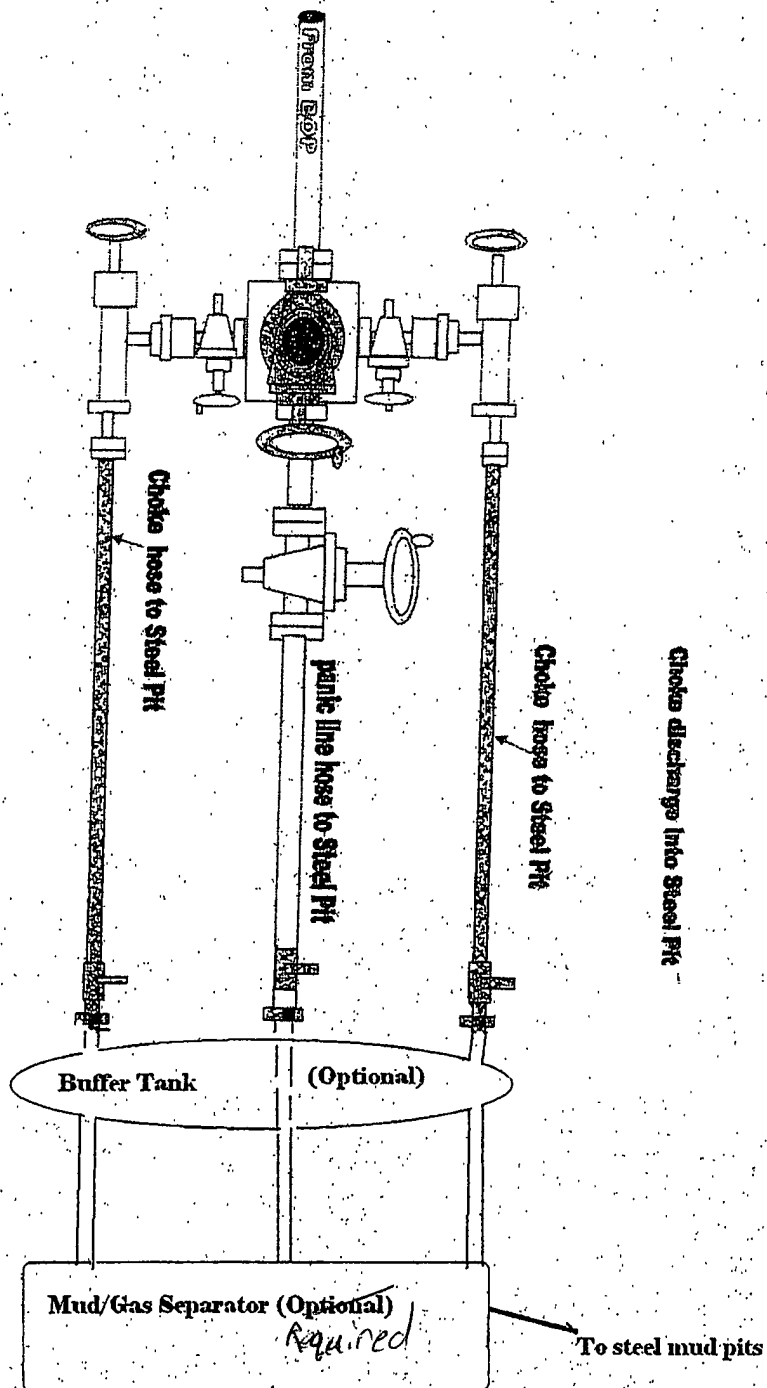


Figure 3-1

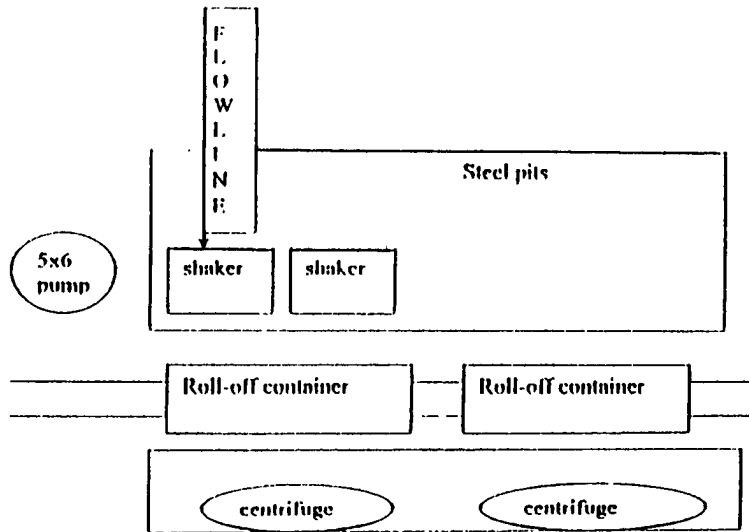
3000[#] & 2000[#] BOP manifold system
(Suggested configuration)



Flare with fluid
knockout drum or
steel pit (Optional)

150 ft from well (H₂S)
100 ft from well (No H₂S)
Means of ignition

Required



This will be maintained by 24 hour solids control personnel that stay on location.

TOMMY WILSON



**CLOSED LOOP
SPECIALTY**

Office: 575.746.1689

Cell: 575.748.6161

**LIME ROCK RESOURCES IIA, L.P., FALCON 3 J FEDERAL,
WELL NO. 29
API: 30-**

A- Sec. 3, T18S-R27E: 1950' FSL & 1775' FEL Eddy Co., NM

DESIGN: Closed Loop System with roll-off steel bins (pits)

CRI/Hobbs will supply (2) bins () volume, rails and transportation relating to the Close Loop system. Specifications of Close Loop System attached.

Contacts: Gary Wallace 432-638-4076 Office # 575-393-1079

Scomi Oil Tool: Supervisor: Armando Soto – 432-553-7978 Hobbs, NM

Monitoring 24 hour service

Equipment:

Centrifuges (brand): Derrick

Rig Shakers (brand): Brandt

D-watering Unit

Air pumps on location for immediate remediation process

Layout of Close Loop System with bins, centrifuges and shakers attached.

Cuttings and associated liquids will be hauled to a State regulated third party disposal site: CRI (Controlled Recovery, Inc.) Disposal Facility Permit # R9166

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

OPERATIONS:

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 will be notified within 48 hours of the spill.

Remediation process started immediately

CLOSURE:

During drilling operations all liquids, drilling fluids and cuttings will be hauled off via CRI (Controlled Recovery Incorporated) Disposal Facility Permit # R9166

POWER OF ATTORNEY**DESIGNATION OF AGENT**

LIME ROCK RESOURCES A, L.P. hereby names the following person as its agent:

Name of Agent: George R. Smith d/b/a/ Energy Administrative Services Company

Agent's Address: P.O. Box 458, Roswell, NM 88202

Agent's Telephone Number: (575) 623-4940

GRANT OF SPECIAL AUTHORITY

LIME ROCK RESOURCES A, L.P. grants its agent the authority to act for it with respect to the following only:

1. Executing forms required to be filed with the Oil Conservation Division of the New Mexico Energy, Minerals and Natural Resources Department.
2. Executive forms required to be filed with the Bureau of Land Management of the Department of Interior of the United States of America.

EFFECTIVE DATE

This power of attorney is effective immediately.

RELIANCE ON THIS POWER OF ATTORNEY

Any person, including the agent, may rely upon the validity of this power of attorney or a copy of it unless that person knows it has terminated or is invalid.

SIGNATURE AND ACKNOWLEDGMENT

LIME ROCK RESOURCES A, L.P.

By: 

Name: Charles Adcock

Title: Managing Director - Lime Rock Resources, G.P.

Date: 10/27/2008

Address: 1111 Bagby Street, Suite 4600, Houston, TX 77002

Telephone Number: (713) 292-9512

State of TEXAS
County of HARRIS

This instrument was acknowledged before me on October 27, 2008 by Charles Adcock,
Managing Director of LIME ROCK RESOURCES A, L.P. acting on behalf of said limited
partnership.

Signature of notarial officer: My commission expires: August 05, 2012