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 Road, 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 and Natural Resources
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

RECEIVED
JUL 26 2012
NMOCD ARTESIA

Form C-101
Revised December 16, 2011

Permit

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

1 Operator Name and Address	2 OGRID Number
Lime Rock Resources II-A, L.P. 1111 Bagby Street, Suite 4600 Houston, Texas 77002	277558
	3 API Number 30-015-40629

4 Property Code	5 Property Name	6 Well No
39418	Choate-Davis 14 State	#1 SWD

7 Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County
J	14	18S	27E		2310	South	1650	East	Eddy

8 Pool Information

SWD; ABO / Wolfcamp / Cisco SWD-1352	97967

Additional Well Information

9 Work Type	10 Well Type	11 Cable/Rotary	12 Lease Type	13 Ground Level Elevation
N	S	Rotary	State	3511 6'
14 Multiple	**15 Proposed Depth**	**16 Formation**	**17 Contractor**	**18 Spud Date**
N	9000	ABO/Wolfcamp / Cisco	United Drilling, Inc	After 06/30/2012

Depth to Ground water	Distance from nearest fresh water well	Distance to nearest surface water
50'	1 71 miles	0 75 miles

19 Proposed Casing and Cement Program

Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
Conductor	26"	20"	91 5	40'	Ready Mix	Surface
Surface	17 5"	13 375"	48	300'	350	Surface
Intermediate	12 25"	9 625"	36	2800'	845	surface
Production	8 75"	7"	26	6675'	600	2600'
Liner	6 125"	4 5"	11 6	6400-9000'	350	6400'

Casing/Cement Program: Additional Comments

SWD-1352

Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
XLT 11"	5000	5000	National Varco

I hereby certify that the information given above is true and complete to the best of my knowledge and belief
I further certify that the drilling pit will be constructed according to NMOCD guidelines ☐, a general permit ☐, or an (attached) alternative OCD-approved plan ☒.

Signature: Jerry Smith

Printed name: Jerry Smith

Title: Assistant Production Supervisor

E-mail Address: jsmith@limerockresources.com

Date: 7-25-12 Phone: 575-748-9724

OIL CONSERVATION DIVISION

Approved By: T. C. Shoard

Title: Geologist

Approved Date: 8/27/2012 Expiration Date: 8/27/2014

Conditions of Approval Attached

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
1220 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, NM 87505

Form C-102
Revised October 15,2009
Submit one copy to appropriate District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number	2 Pool Code	3 Pool Name
30-015-40629	97967	SWD;ABO/Wolfcamp/Cisco

4 Property Code	5 Property Name	6 Well Number
39418	CHOATE-DAVIS "14" STATE SWD	1

7 OGRID No.	8 Operator Name	9 Elevation
277558	LIME ROCK RESOURCES II A, L.P.	3511.3

10 Surface Location

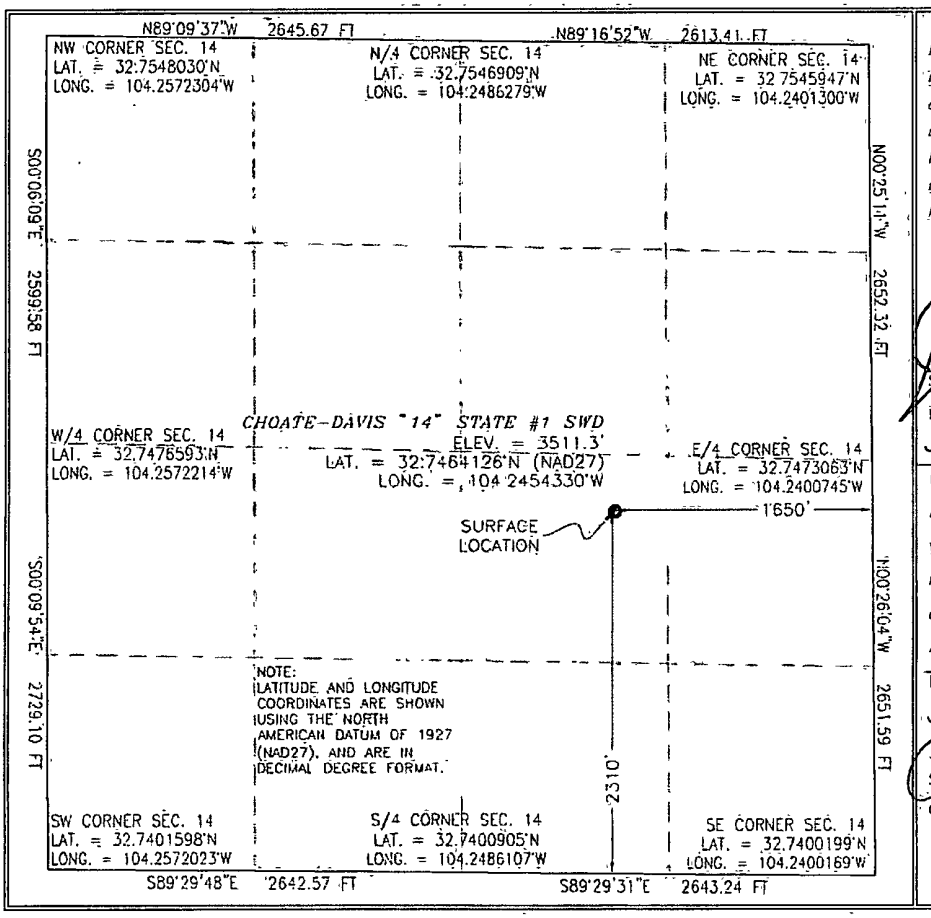
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
J	14	18 S	27 E		2310	SOUTH	1650	EAST	EDDY

11 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

12 Dedicated Acres	13 Joint or Infill	14 Consolidation Code	15 Order No.
40			SWD-1352

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.



17 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 a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division

Signature 7-25-12 Date

Printed Name
Jerry Smith

18 SURVEYOR 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.

APRIL 5, 2012
Date of Survey

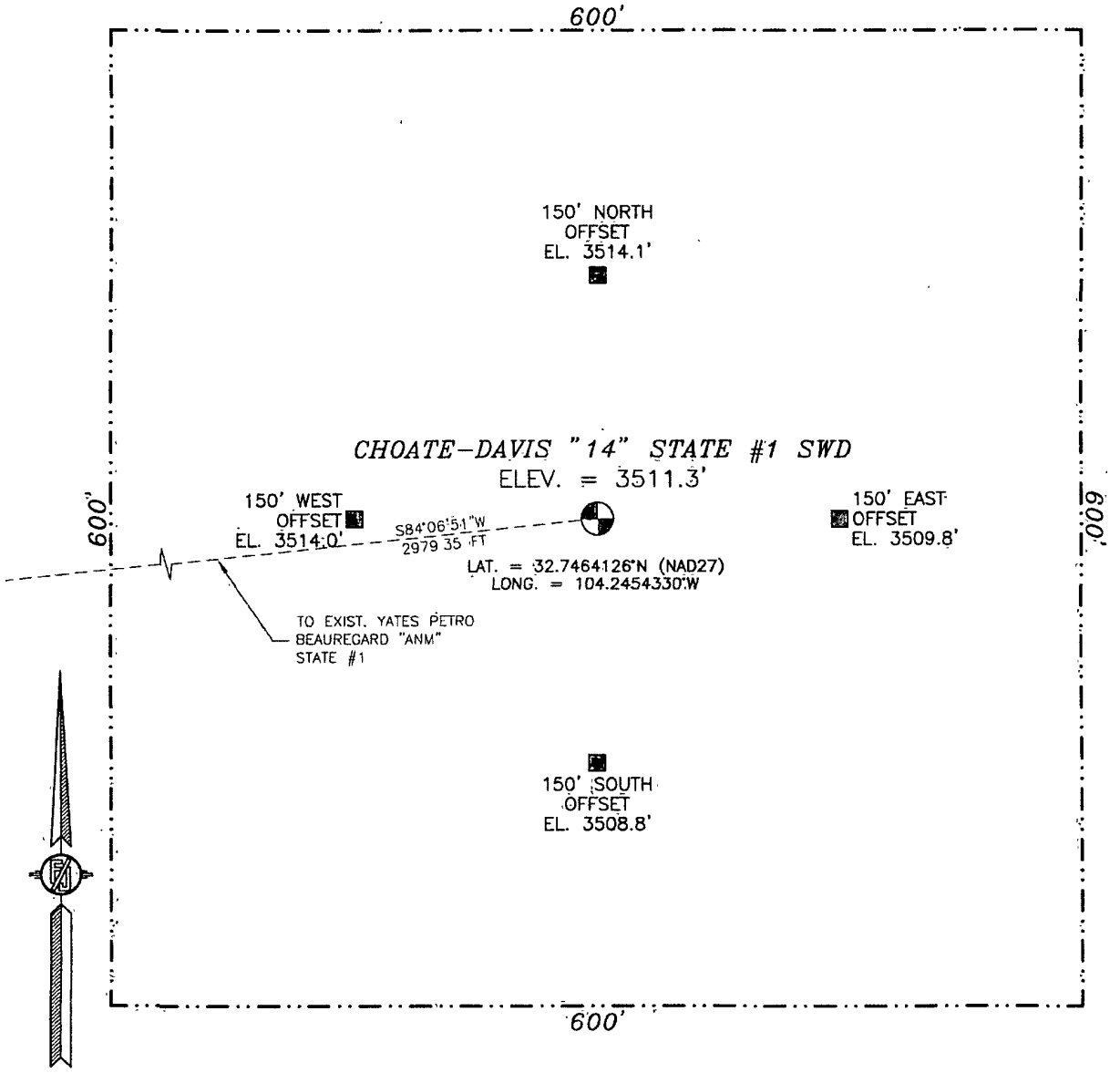
Signature and Seal of Professional Surveyor:
EDWARD L. JARAMILLO
NEW MEXICO
12797
REGISTERED PROFESSIONAL SURVEYOR

Certificate Number EDWARD L. JARAMILLO, PLS 12797

SURVEY NO 901A

SECTION 14, TOWNSHIP 18 SOUTH, RANGE 27 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO

NOTE: THE LATITUDE AND LONGITUDE COORDINATES ARE SHOWN USING THE NORTH AMERICAN DATUM OF 1927 (NAD27), AND ARE IN DECIMAL DEGREE FORMAT.



010 50 100 200

SCALE 1" = 100'

DIRECTIONS TO LOCATION

FROM PAVED Cr 206 (ILLINOIS CAMP) AND CALICHE Cr 234 (OIL CENTER) GO SOUTHWEST ON Cr 234 0.7 MILES, TURN RIGHT ON CALICHE ROAD AND GO NORTH, THEN WEST AROUND RANCH HOUSE A TOTAL OF 1.7 MILES, TURN RIGHT AND GO NORTH 1.4 MILES, TURN RIGHT ON AGAVE P/L TWO TRACK ROAD AND GO EAST 0.3 MILES AND LOCATION IS ON THE LEFT (NORTH) 565 FT.

LIME ROCK RESOURCES II A, L.P.

CHOATE-DAVIS "14" STATE #1 SWD

LOCATED 2310 FT. FROM THE SOUTH LINE AND 1650 FT. FROM THE EAST LINE OF SECTION 14, TOWNSHIP 18 SOUTH, RANGE 27 EAST, N.M.P.M. EDDY COUNTY, STATE OF NEW MEXICO

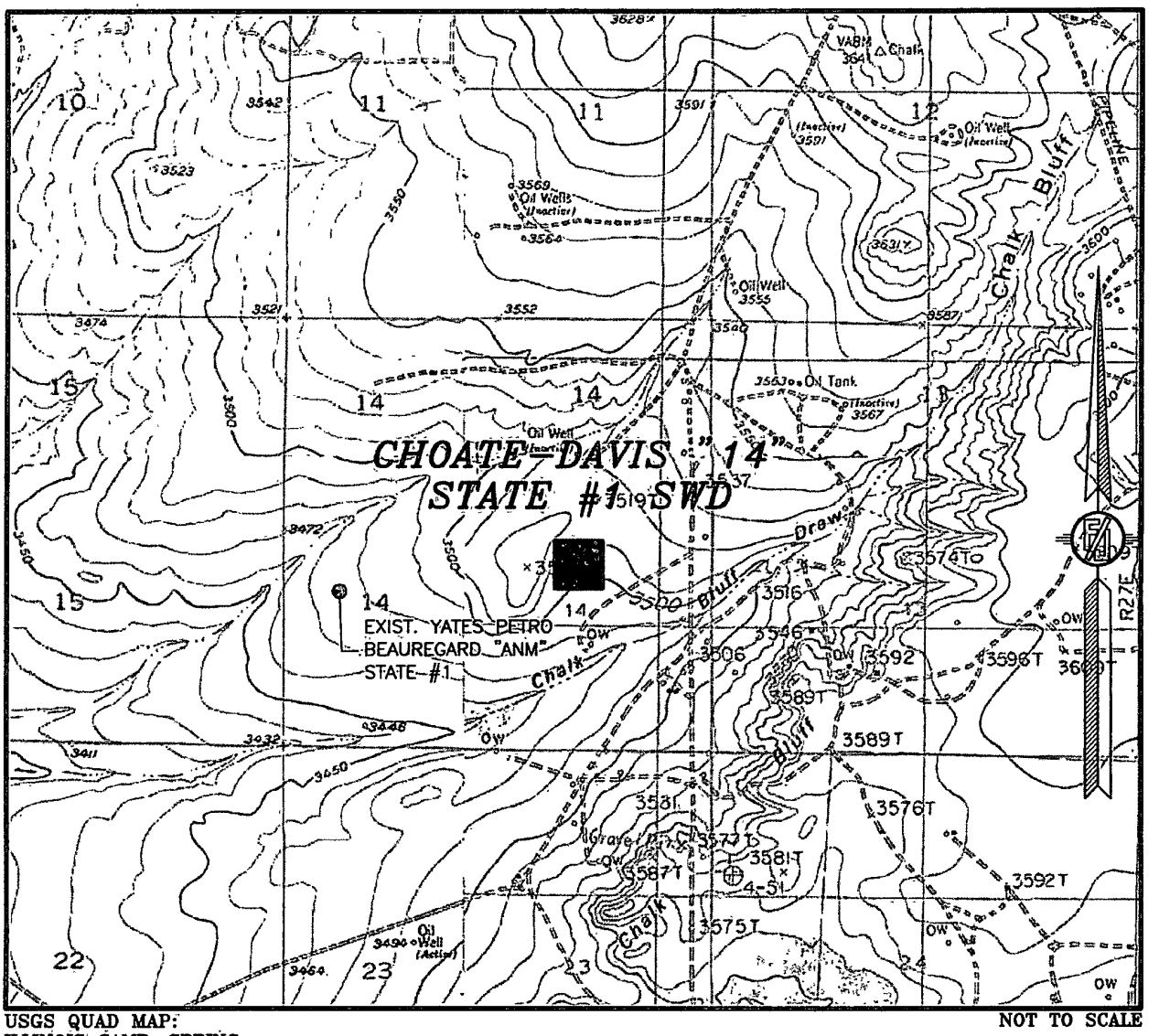
APRIL 5, 2012

SURVEY NO. 901A

MADRON SURVEYING, INC. 301 SOUTH CANAL (575) 234-3341 *CARLSBAD, NEW MEXICO*

SECTION 14, TOWNSHIP 18 SOUTH, RANGE 27 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO

LOCATION VERIFICATION MAP



USGS QUAD MAP:
ILLINOIS CAMP, SPRING LAKE, LAKE McMILLON NORTH, RED LAKE

NOT TO SCALE

LIME ROCK RESOURCES II A, L.P.

CHOATE-DAVIS "14" STATE #1 SWD

LOCATED 2310 FT. FROM THE SOUTH LINE
AND 1650 FT. FROM THE EAST LINE OF
SECTION 14, TOWNSHIP 18 SOUTH,
RANGE 27 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO

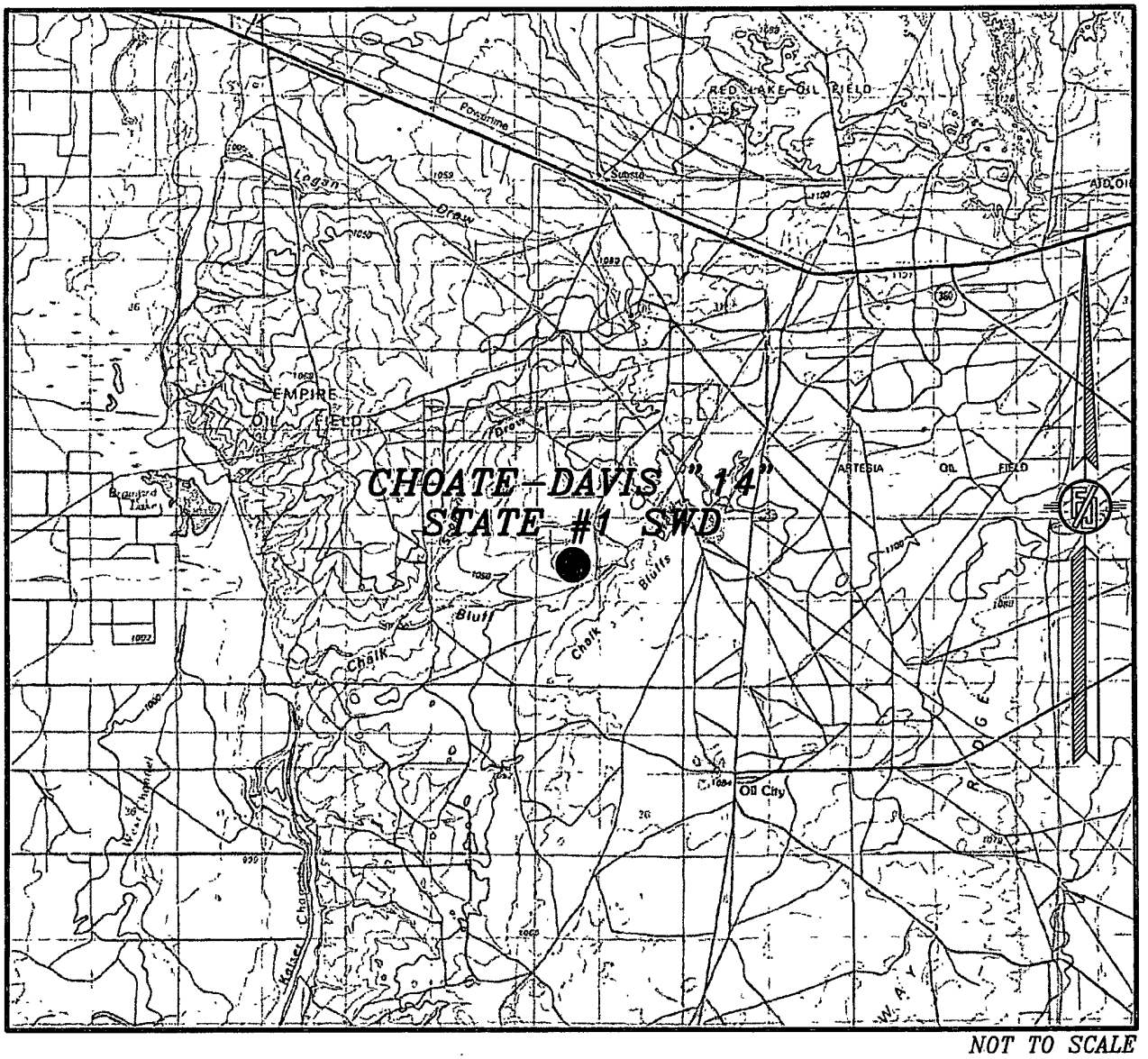
APRIL 5, 2012

SURVEY NO. 901A

MADRON SURVEYING, INC. 301 SOUTH CANAL (575) 234-3341 CARLSBAD, NEW MEXICO

SECTION 14, TOWNSHIP 18 SOUTH, RANGE 27 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO

VICINITY MAP



NOT TO SCALE

LIME ROCK RESOURCES II A, L.P.

CHOATE-DAVIS "14" STATE #1 SWD

LOCATED 2310 FT. FROM THE SOUTH LINE
AND 1650 FT. FROM THE EAST LINE OF
SECTION 14, TOWNSHIP 18 SOUTH,
RANGE 27 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO

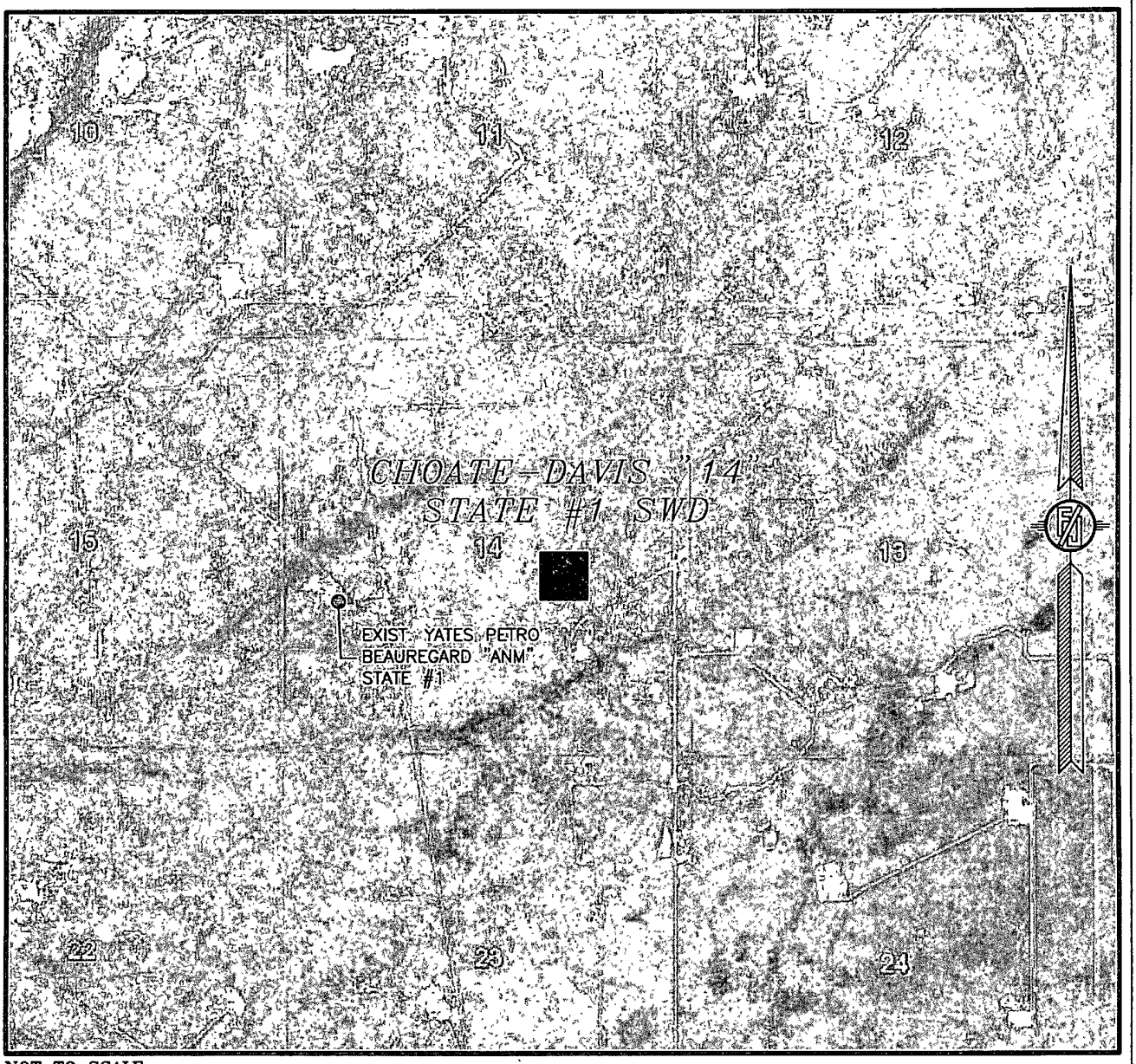
APRIL 5, 2012

SURVEY NO. 901A

MADRON SURVEYING, INC. 301 SOUTH CANAL (575) 234-3341 CARLSBAD, NEW MEXICO

SECTION 14, TOWNSHIP 18 SOUTH, RANGE 27 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO

AERIAL PHOTO



NOT TO SCALE
AERIAL PHOTO:
GOOGLE EARTH
JUNE, 2011

LIME ROCK RESOURCES II A, L.P.

CHOATE-DAVIS "14" STATE #1 SWD

LOCATED 2310 FT. FROM THE SOUTH LINE
AND 1650 FT. FROM THE EAST LINE OF
SECTION 14, TOWNSHIP 18 SOUTH,
RANGE 27 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO

APRIL 5, 2012

SURVEY NO. 901A

MADRON SURVEYING, INC. 301 SOUTH CANAL (575) 234-3341 CARLSBAD, NEW MEXICO

Lime Rock Resources II-A, L.P.
Drilling Plan

Choate-Davis 14 State #1 SWD
2310' FSL 1650' FEL
J-S14-T18S-R27E
Eddy County, NM

1. The elevation of the unprepared ground is 3511.6' feet above sea level.
2. The geologic name of the surface formation is Permian with Quaternary Alluvium.
3. A rotary rig will be utilized to drill the well to 9000' and run four strings of casing to protect usable water, potential productive formations and injection equipment. The drilling rig will be rigged down and the well will be completed with a workover rig.
4. Proposed total depth is 9000'. Please refer to the well bore diagram attached to this drilling plan.
5. Estimated tops of geologic markers:

Quaternary – Alluvium	Surface	
Conductor Pipe	40'	Setting Depth of 20" Casing
Surface Casing	300'	Setting Depth of 13-3/8" Casing
Seven Rivers	480'	
Queen	1075'	
San Andres	1900'	
Intermediate Casing	2800'	Setting Depth of 9-5/8" Casing
Glorieta	3630'	
Abo	5250'	
Top of Liner	6400'	Top of Liner hanger/packer/PBR
Top of Injection Zone	6500'	
Production Casing	6675'	Setting Depth of 7" Casing
Wolfcamp	6650'	
Cisco	7685'	
TD	9000'	

6. Estimated depths at which anticipated oil, gas, or other mineral bearing formations are expected to be encountered:

Seven Rivers	480'
Queen	1075'
San Andres	1900'
TD	9000'

7. **Proposed Casing and Cement program is as follows:**

Type	Hole Size, in	Casing Size	Wt	Grade	Thread	Depth	Sx	Density	Yield	Components
Conductor	26	20	91.5	B	B	40				Ready Mix
Surface	17.5	13.375	48	H-40	ST&C	300	350	14.8	1.35	Cl C Cmt w/ 1/4 pps Cello Flake + 2% CaCl2
Intermediate	12.25	9.625	36	J-55	LT&C	2800	320	12.8	1.903	35/65/6 Poz/Cl C/Gel w/ 5% NaCl, 5 pps LCM-1, 0.3% R-3 and 1/4 pps Cello Flake
							525	14.8	1.33	Cl C w/ 1/4 pps Cello Flake and 0.6% R-3
Production	8.75	7	26	L-80	LT&C	6650	300	13.2	1.84	35:65 Poz/Cl H w/ 6% Gel, 0.125 lbs/sk Cello Flake, 5 pps LCM-1 and retarder
							300	15.2	1.18	Cl H w/ 0.6% R-3, 0.125% Cello Flake, 2% Gel
LINER	6.125	4.5	11.6	L-80	LT&C	6400-9000	340	13.8	1.32	Cl H/POZ Light Weight Cement w/ 2% gel

8. **Proposed Mud Program is as follows**

Depth	300	2800	2800-6675	6675-8800	8800-9000
Mud Type	Fresh Water Mud	Brine	Brine, Salt Gel & Starch	Brine, Salt Gel & Starch	Brine, Salt Gel & Starch
Properties					
MW	8.5-9.3	9.8-10.1	9.9-10.0	9.3-9.7	9.3-9.7
pH	10	10-11.5	11-12	11-12	11-12
WL	NC	NC	20-30	NC	<50
Vis	28-34	29-32	32-35	32-34	34-35
MC	NC	NC	<2	NC	<2
Solids	NC	<1	<3	<3	<3
Pump Rate	300-350	375-425	400-450	400-450	400-450
Special		Use Polymers sticks and MF-55 Hi-Vis Sweeps as necessary	Hi Vis Sweeps, add acid and starch as req. Raise Vis to 35 for log	Hi Vis Sweeps, add acid and starch as req. Raise Vis to 35 for log	Hi Vis Sweeps, add acid and starch as req. Raise Vis to 35 for log

9. **Pressure Control Equipment: See Attached Description and diagram of Pressure Control Equipment.**

10. **Testing, Logging and Coring Program**

Testing Program:	No drill stem tests are anticipated
Mud Logging Program:	Mud Log from Intermediate to total depth
Electric Logging Program:	SGR-DLL-CDL-CNL Quad Combo from 6650 to intermediate csg, then same log from 9000' up to production casing @ 6650'.
Coring Program:	No full or sidewall cores are anticipated.

11. **Potential Hazards:**

No abnormal temperatures or pressures are expected. There is no known presence of H2S in this area. If H2S is encountered the operator will comply with the provisions of state regulations and BLM Onshore Oil and Gas Order No. 6. All personnel will be familiar with all aspects of safe operation of equipment being used to drill this well. Estimated BHP 3960 psi based on 0.44 x TD. The estimated BHT is 148 degrees F.

12. Duration of Operations:
Anticipated spud date will be soon after approval and as soon as a rig will be available. Move in operations and drilling is expected to take 15 days. An additional 30 days will be needed it complete the well and to construct surface facilities.

13. Completion Operations:

(a) Once a C-108 application to inject is approved, LRE intends to perforate the injection intervals in the ABO (6500 to 6600' or at depths found in the last 150' of the ABO open hole log), in the Wolfcamp from 6650' (or the top of the Wolfcamp found in the open hole log) to the top of the Cisco formation at approximately 7,685' (or as found on the open hole log), and the Cisco formation from the top to 9000' (as the depth of the Cisco top as found on the open hole log to 9000').

(b) Once the well is perforated, a work string will be used with a packer to acidize the ABO / WOLFCAMP / CISCO injection interval with 10,000 gallons of 15% HCL, then the packer will be pulled and the work string laid down,

(c) A string of 4-1/2", L-80, 11.6 ppf, LT&C tubing lined with Duoline (fiberglass) will be run with a seal assembly and stung into a PBR on top of the liner at 6400' MD. The annulus will be tested to 500 psig for 30 minutes,

(d) Before injection, personnel will schedule an MIT test with the NM OCD, perform the MIT and then injection will start into the ABO / WOLFCAMP / CISCO formation when approved by the NM OCD.

Pressure Control Equipment

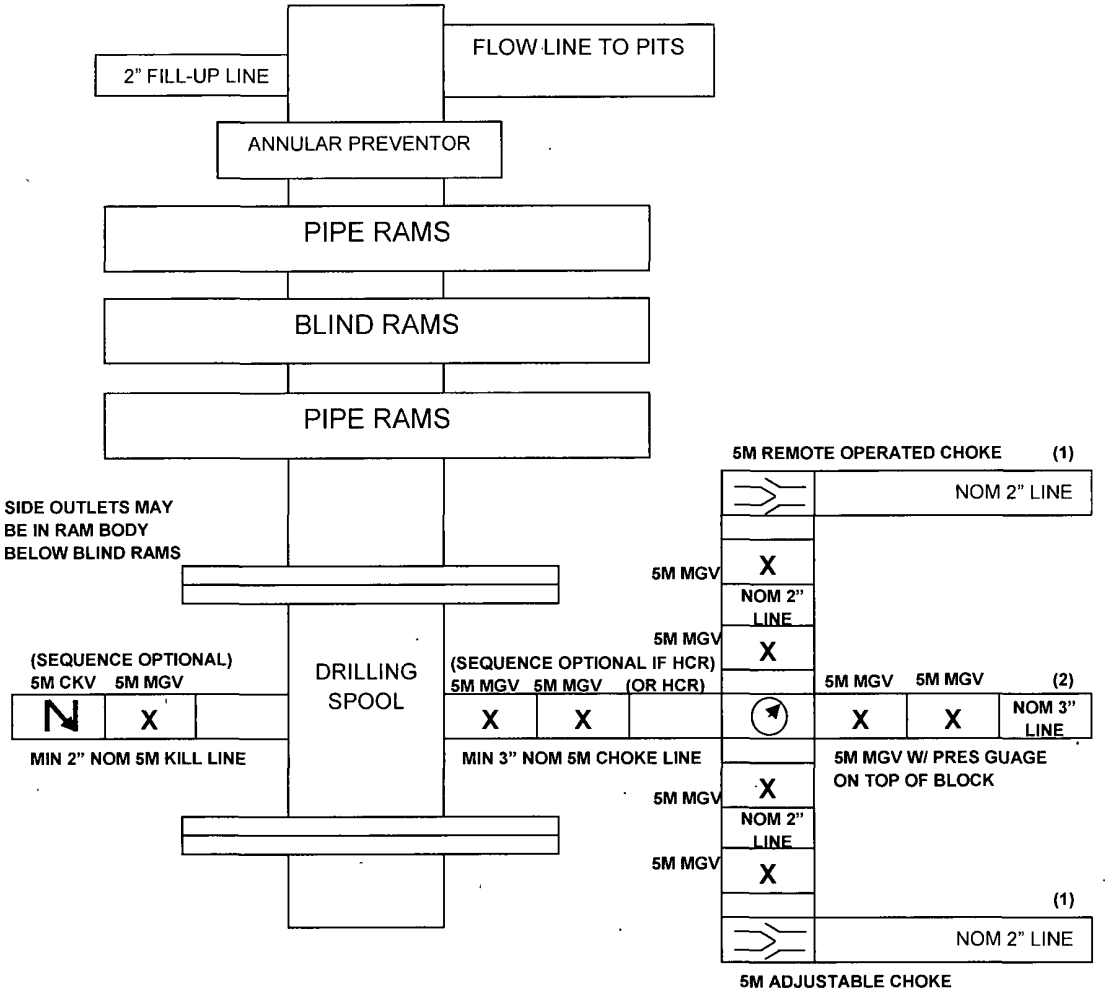
The blowout preventer equipment (BOP) will consist of a 5000 psi Triple ram type preventer, a bag-type (Hydril) preventer and rotating head. Both units will be hydraulically operated and the ram type preventer will be equipped with Drill Pipe Rams on top, Blind Rams in the middle and drill pipe rams on bottom. A 5M BOP will be installed on the 8 5/8" surface casing and utilized continuously until the depth is reached. All casing strings will be tested as per Onshore Order #2.

Pipe rams will be operated and checked each 24 hour period and each time the drill pipe is out of the hole. These functional tests will be documented on the daily drilling logs.

The BOP equipment will consist of the following:
-Annular preventer*
-Pipe ram, blind ram, and, if conditions warrant, as specified by the authorized officer, another pipe ram shall also be required*
-A second pipe ram preventer shall be used with a tapered drill string
-Drilling spool, or blowout preventer with 2 side outlets (choke side shall be a 3-inch *minimum diameter, kill side shall be at least 2-inch diameter)**
-3 inch diameter choke line
-2 choke line valves (3 inch minimum)*
-Kill line (2 inch minimum)
-2 chokes with 1 remotely controlled from rig floor (refer to diagram in Attachment 1)
-2 kill line valves and a check valve (2 inch minimum)*

-Upper kelly cock valve with handle available
-When the expected pressures approach working pressure of the system, 1 remote kill line tested to stack pressure (which shall run to the outer edge of the substructure and be unobstructed)
-Lower kelly cock valve with handle available
-Safety valve(s) and subs to fit all drill string connections in use
-Inside BOP or float sub available -Pressure gauge on choke manifold
-All BOPE connections subjected to well pressure shall be flanged, welded, orclamped*
-Fill-up line above the uppermost preventer.

5M BOP SCHEMATIC



(1) Line to mud gas separator and/or pit
(2) Bleed line to pit

MGV = Manual Gate Valve
CKV = Check Valve
HCR = Hydraulically Controlled Remote Valve

LIME ROCK RESOURCES II-A, L.P.

Choate-Davis 14 State #1 SWD
HYDROGEN SULFIDE (H_2S) CONTINGENCY DRILLING PLAN

Assumed 100 ppm ROE = 3000'

100 ppm H_2S concentration shall trigger activation of this plan.

This is an open drilling site. H_2S monitoring equipment, along with a choke manifold, mud/gas separator, and flare will be rigged up and in use when the company drills out from under surface casing. H_2S monitors, warning signs, wind indicators and flags will be in use.

SUMMARY PLAN

1. All personnel shall receive proper H_2S training in accordance with Onshore Oil and Gas Order No. 6.III.C.3.a. A minimum of an initial training session and weekly H_2S and well control drills for all personnel in each working crew shall be conducted. The initial training session for each well shall include a review of the this Drilling Operations Plan and site specific measures and areas set up when the rig is moved onto location.

2. The company has caused the drilling contractor and other vendors to install 5000 psi well control systems including:

   A. A choke manifold with:

      i. One remotely operated choke,
      ii. a flare line and flare that is 150' from the wellhead to be ignited, in the event the plan is put into effect, with an electronic ignition system or a back up flare gun,
      iii. a mud/gas separator downstream of the of the choke and upstream of the flare,
      iv. All BOP equipment required for a 5000 psi well control system will be in place and tested by a third party to 250 psi low pressure and 5000 psi high pressure. This test will include testing all lines and equipment associated with the choke manifold and kill line. Weekly BOP function and control drills will be performed with all applicable crews and personnel on location.

3. At rig move in, two perpendicular briefing areas readily accessible will be designated and marked with signage. A clear foot path for escape will be designated and marked.

4. The following protective equipment for essential personnel will be located on location at rig move in:

   A. Breathing apparatus:

      i. Rescue Packs (1 at each briefing area and 2 stored in the designated safety equipment storage area), shall be on location,
      ii. 4 work/escape packs shall be stored on the rig floor with sufficient hose to allow work activity,
      iii. 4 Emergency escape packs shall be stored in the rig doghouse for emergency evacuation,

H2S CONTINGENCY DRILLING PLAN

B. Auxiliary Rescue Equipment will be available in the designated safety equipment storage area and will include:

   i. Stretcher,
   ii. Two OSHA approved full body harnesses,
   iii. 100 feet of 5/8 inch OSHA approved rope,
   iv. 2-20# Class ABC fire extinguishers.

5. H_2S detection and monitoring equipment shall be in place before drilling out surface casing. There will be a stationary detector in the rig dog house and another with the mud log equipment on the end of the flow line. Three sensors will be placed on the rig floor, the wellhead/cellar, and on the closed loop equipment. The detection level for H_2S will be set at 10 ppm and the alarm will sound if any level of the gas is detected over 10 ppm.

6. Visual warning systems will be in place at rig move in and before the surface casing is drilled out. Color coded signage will be placed at the entrance to location indicating H_2S is possible, and furthermore, the color will be changed should the site condition dictate. If H_2S is detected, then a color coded condition flag will be displayed to indicate levels of detection. Wind socks will be placed at the location entrance and one other fully visible site to allow personnel to determine wind direction and safe escape/briefing routes.

7. The mud program utilized on this well is intended to provide sufficient density to exclude H_2S from the wellbore. Furthermore, Loss Circulation Material will be added before any known loss circulation (low pressure) zones are encountered. Corrosion inhibitors are included in the mud system to prevent failures in the event H_2S does enter the wellbore, and seal rings are used to prevent the use of elastomers on the wellhead equipment. In the event a rotating head is necessary, elastomers will be designed to operate in H_2S conditions. Drill collars and other bottom hole assembly components are to be inspected after each well, and in the event H_2S is encountered in the wellbore, drill pipe shall be inspected as well.

8. The location shall be equipped with one cell telephone in the rig doghouse, one cell telephone with the well site supervisor, two way communication devices to communicate between mud system personnel, rig floor personnel, mud log personnel, and safety personnel on location. In the event H_2S is detected, a company vehicle with two way radios shall be moved into a safe briefing area and manned for communication with all vendors, company personnel or agency personnel as required.

H2S CONTINGENCY DRILLING PLAN

EMERGENCY PROCEDURES

Escape

Crews shall escape upwind of escaping gas in the event of an emergency release of gas, or if monitors indicate H_2S is present. Escape will take place via the entry road away from the flare stack, or a foot path marked and designated before the well is spud by on site personnel. Once crews and other personnel are a safe distance, the crews will move to evacuate any persons in the Radius of Exposure, followed by blocking access to the Radius of Exposure.

There are no homes or buildings within the Radius of Exposure ("ROE"), so efforts will be concentrated on evacuating any third parties within the ROE. Immediate response will include evacuation of any persons potentially affected by toxic or flammable gasses. Once evacuation is under way, perimeter monitoring and control of access will be executed to ensure safe areas and stage areas.

In the event of a release of gas containing H_2S, the first responder(s) must

- Isolate the area and prevent entry by other persons into the 100 ppm ROE.
- Evacuate any public places encompassed by the 100 ppm ROE.
- Be equipped with H_2S monitors and air packs in order to control the release.
- Use the "buddy system" to ensure no injuries occur during the response
- Take precautions to avoid personal injury during this operation.
- Contact operator and/or local officials to aid in operation. See list of phone numbers attached.
- Have received training in the
    - Detection of H_2S, and
    - Measures for protection against the gas,
    - Equipment used for protection and emergency response.

Ignition of Gas Source

Should control of the well be considered lost and ignition considered, take care to protect against exposure to Sulfur Dioxide ($S0_2$). Intentional ignition must be coordinated with the NMOCD and local officials. Additionally the NM State Police may become involved. NM State Police shall be the Incident Command on scene of any
major release. Take care to protect downwind whenever this is an ignition of the gas.

Characteristics of H_2S and $S0_2$

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	$S0_2$	2.21 Air= 1	2ppm	N/A	1000 ppm

H2S CONTINGENCY DRILLING PLAN

Contacting Authorities

Lime Rock Resources personnel must liaison with local and state agencies to ensure a proper response to a major release. Additionally, the OCD must be notified of the release as soon as possible but no later than 4 hours. Agencies will ask for information such as type and volume of release, wind direction, location of release, etc. Be prepared with all information available including directions to site. The following call list of essential and potential responders has been prepared for use during a release. Lime Rock Resources response must be in coordination with the State of New Mexico's "Hazardous Materials Emergency Response Plan" (HMER) and BLM Onshore Order #6.

H_2S OPERATIONS

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, and 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.

H2S CONTINGENCY DRILLING PLAN EMERGENCY CONTACTS

Company Offices -	Lime Rock Houston Office	713-292-9510
	Answering Service (After Hours)	713-292-9555
	Artesia, NM Office	575-748-9724
	Roswell, NM	575-623-8424

KEY PERSONNEL					
Name	**Title**	**Location**	**Office #**	**Cell #**	**Home #**
SID ASHWORTH	PRODUCTION ENGINEER	HOUSTON	713-292-9526	713-906-7750	713-783-1959
JERRY SMITH	ASSISTANT PRODUCTION SUPERVISOR	ARTESIA	575-748-9724	505-918-0556	575-746-2478
MICHAEL BARRETT	PRODUCTION SUPERVISOR	ROSWELL	575-623-8424	505-353-2644	575-623-4707
GARY FATHEREE	WELL SITE SUPERVISOR	ROTATES ON SITE	NA	940-389-6044	NA
GARY MCCELLAND	WELL SITE SUPERVISOR	ROTATES ON SITE	NA	903-503-8997	NA

Agency Call List		
City	**Agency or Office**	**Telephone Number**
Artesia	Ambulance	911
Artesia	State Police	575-746-2703
Artesia	Sheriff's Office	575-746-9888
Artesia	City Police	575-746-2703
Artesia	Fire Department	575-746-2701
Artesia	Local Emergency Planning Committee	575-746-2122
Artesia	New Mexico OCD District II	575-748-1283
Carlsbad	Ambulance	911
Carlsbad	State Police	575-885-3137
Carlsbad	Sheriff's Office	575-887-7551
Carlsbad	City Police	575-885-2111
Carlsbad	Fire Department	575-885-2111
Carlsbad	Local Emergency Planning Committee	575-887-3798
Carlsbad	US DOI Bureau of Land Management	575-887-6544
State Wide	New Mexico Emergency Response Commission ("NMERC")	505-476-9600
State Wide	NMERC 24 hour Number	505-827-9126
State Wide	New Mexico State Emergency Operations Center	505-476-9635
National	National Emergency Response Center (Washington, D.C.)	800-424-8802

H2S CONTINGENCY DRILLING PLAN EMERGENCY CONTACTS

Emergency Services				
Name	Service	Location	Telephone Number	Alternate Number
Boots & Coots International Well Control	Well Control	Houston / Odessa	1-800-256-9688	281-931-8884
Cudd Pressure Control	Well Control & Pumping	Odessa	915-699-0139	915-563-3356
Baker Hughes Inc.	Pumping Service	Artesia, Hobbs and Odessa	575-746-2757	SAME
Total Safety	Safety Equipment and Personnel	Artesia	575-746-2847	SAME
Cutter Oilfield Services	Drilling Systems Equipment	Midland	432-488-6707	SAME
Assurance Fire & Safety	Safety Equipment and Personnel	Artesia	575-396-9702	575-441-2224
Flight for Life	Emergency Helicopter Evacuation	Lubbock	806-743-9911	SAME
Aerocare	Emergency Helicopter Evacuation	Lubbock	806-747-8923	SAME
Med Flight Air Ambulance	Emergency Helicopter Evacuation	Albuquerque	505-842-4433	SAME
Artesia General Hospital	Emergency Medical Care	Artesia	575-748-3333	702 North 13 Street

LIME ROCK RESOURCES	County	Well Name	Field	Well Sketch ABO Wolfcamp Cisco SWD
	EDDY	Choate-Davis 14 State Com #1 SWD	East Artesia	Lime Rock Resources II-A, L.P.
	Surface Lat 32 7467126° N (NAD 27)	BH Lat Same	Survey S14-T18S-R27E, NE/4 Unit J	API # New
	Surface Long 104 2454330° W	BH Long Same	SHL 2310' FSL & 1650' FEL	OGRID # 277558

Directional Data:

KOP	NA
Max Dev	
Dleg sev	0
Dev @ Perfs	0
Ret to Vert	Straight Hole

Drilling / Completion Fluid

Drilling Fluid	10 PPG Brine / Salt Gel
Drilling Fluid	9 4 PPG Brine/Salt gel in 6-1/8"
Completion Fluid	2% KCL
Completion Fluid	
Packer Fluid	2% KCL w/ Bactericide & O2 Sc

Tubular Data

Tubulars	Size	Weight	Grade	Thread	TVD	MD	TOC
Conductor	20"	91 5#	B	Weld	40'	40'	SURF
Surface	13 3/8"	48#	H-40	STC	300'	300'	SURF
Intermediate	9-5/8"	36#	J-55	LTC	2,800'	2,800'	SURF
Production	7"	26#	L-80	LTC	6,650'	6,650'	2600
Liner	4-1/2"	11 6#	J-55	LTC	9,000'	9,000'	6400

CEMENT DATA

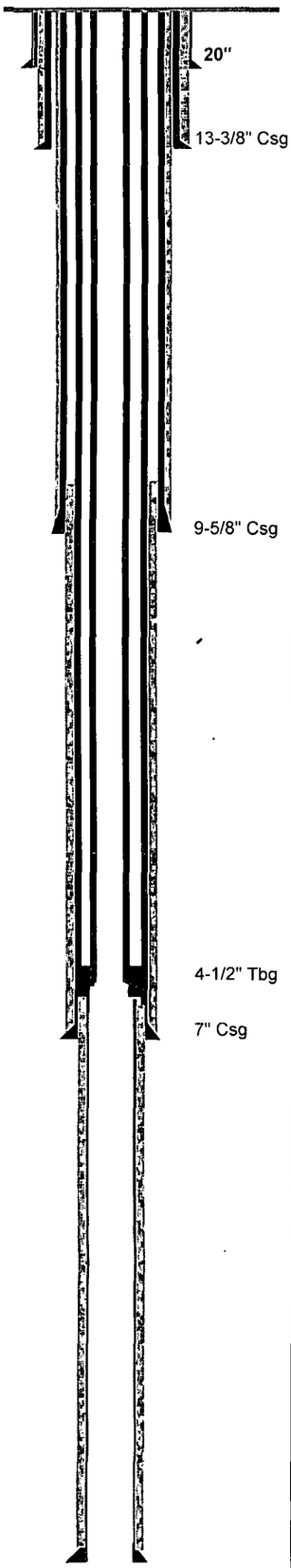
	L/sks	Yld	Wt	T/sks	Yld	Wt	XS
Surface	280	1 34	14 8	NA	NA	NA	200%
Intermediate	320	1 903	12.8	525	1 33	14 8	150%
Production	310	1 84	13 2	350	1 18	15 2	150%
Liner	340	1 32	13 8	NA	NA	NA	200%

Wellhead Data

Type	
WP	
Tree Cap	Flange
	Thread
Tbg Hanger	
8TM Flange	
BPV Profile	NA
Elevations	GR - RKB = 13 4'
RKB est	3524 7'
GL	3511 3'

Wellbore Sketch

Lime Rock Resources II-A, L.P.



TD - 9000'

Completion Information

DEPTHS (MD)	WELL INFO	PERFORATIONS from	to	# of HOLES	DETAILS
40	26" Hole				20" Conductor Pipe Cmt'd to Surf w/ ready mix
	17-1/2" Hole				
300'					13-3/8" Casing set at 300' and cmt'd to surf
	12-1/4" Hole				
480'	Seven Rivers Sand				
1075'	Queen Sand				
1900'	San Andres Formation				
2600'					TOC behind 7", 26# Casing
2,800'					9-5/8" Casing set at 2800' and cmt'd to surf
	8-3/4" Hole				
3630'	Glorieta Top				
3780'	Yeso Formation				
5250'	Abo Formation				
6400'	**Tubing**				4-1/2", 11 6#, tbg, duolined @ 6500'
6500'	ABO Inj Zone	6,500'	6,600'		PBR on top of ZXP Liner Top Packer
6675'	Wolfcamp Formation				7", 26# Casing set at 6675' & cmt'd to 2600'
	Wolfcamp Inj Zone	6,650'	7,685'		
	6-1/8" hole				
7685'	**Cisco Formation and Injection Zone**	7,685'	9,000'		Cased Injection Zone ABO Injection 6500' to 6600' MD (100 Holes) Wolfcamp Injection 6650' to 7685' MD (500 holes) Cisco Injection 7685' to 9000' MD (350 Holes)
9000'	Cisco Formation				
9000'	Total Depth				4-1/2" Liner 6400 to 9000' Cmt'd in place

Accepted for record
NMOCD
7/27/2012

RECEIVED
JUL 27 2012
NMOCD ARTESIA

Comments

4-1/2" Liner set from TD (9000' MD/TVD) to overlap in 7" casing @ 6400' MD Circ cement to top of liner and set ZXP packer with polish Bore Receptacle on top Sting seals on bottom of 4-1/2" Duoline tubing into PBR on Packer

Plug back Depth	9,000'	MD
Total Well Depth	9,000'	MD
Prepared By	*Date*	
Sid Ashworth	**7/25/2012 Rev 1**	