

State of New Mexico  
Energy Minerals and Natural Resources  
Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 8705

District IV

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

<sup>1</sup> Operator Name and Address <b>Reliant Exploration &amp; Production, LLC.</b> 3700 Kermit Highway Odessa, Texas 79764		<sup>2</sup> OGRID Number 251905
<sup>3</sup> Property Code <b>37025</b>	<sup>4</sup> Property Name <b>LIBBY MINERALS LLC 1931</b>	<sup>5</sup> APT Number 30 - 021-20450
<sup>9</sup> Proposed Pool 1 Bravo Dome 96010		<sup>10</sup> Proposed Pool 2

7 Surface Location									
UL or lot no. F	Section 6	Township 19 North	Range 31 East NMPM	Lot Idn	Feet from the 1801'	North/South line North	Feet from the 1731'	East/West line West	County Harding

8 Proposed 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

Additional Well Information				
<sup>11</sup> Work Type Code N	<sup>12</sup> Well Type Code C	<sup>13</sup> Cable/Rotary R	<sup>14</sup> Lease Type Code P	<sup>15</sup> Ground Level Elevation 4515
<sup>16</sup> Multiple NO	<sup>17</sup> Proposed Depth 2600'	<sup>18</sup> Formation TUBB	<sup>19</sup> Contractor CAPSTAR DRILLING	<sup>20</sup> Spud Date 3/20/2008
Depth to Groundwater > 100'		Distance from nearest fresh water well > 1000'		Distance from nearest surface water > 1000'
Pit: <input type="checkbox"/> Liner: Synthetic <input type="checkbox"/> 12 mils thick Clay <input type="checkbox"/> Pit Volume: 850 bbls Drilling Method:				
Closed-Loop System <input type="checkbox"/> Fresh Water <input checked="" type="checkbox"/> Brine <input type="checkbox"/> Diesel/Oil-based <input type="checkbox"/> Gas/Air <input type="checkbox"/>				

21 Proposed Casing and Cement Program					
Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
12-1/4"	8-5/8"	24#	700'	300SX	SURFACE
7-7/8"	5-1/2"	5.9#FG/15.5#	2600'	400SX	SURFACE

<sup>22</sup> Describe the proposed program. If this application is to DEEPEN or PLUG BACK, give the data on the present productive zone and proposed new productive zone. Describe the blowout prevention program, if any. Use additional sheets if necessary.

SEE ATTACHMENTS

**OIL CONSERVATION COMMISSION TO BE NOTIFIED  
WITHIN 24 HOURS OF BEGINNING OPERATIONS**

<sup>23</sup> 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 <input checked="" type="checkbox"/> , a general permit <input type="checkbox"/> , or an (attached) alternative OCD-approved plan <input type="checkbox"/> .		<b>OIL CONSERVATION DIVISION</b>	
Signature:		Approved by:	
Printed name: Scott S. Vanderburg		Title: <b>DISTRICT SUPERVISOR</b>	
Title: President		Approval Date: 3/3/08      Expiration Date: 3/3/10	
E-mail Address: scotttv@reliantholdingsltd.com		Conditions of Approval Attached <input type="checkbox"/>	
Date: 2/19/2008		Phone: 432-362-9206	

COLLECT AND SACK SAMPLES FOR  
NEW MEXICO BUREAU OF MINES, SOCORRO  
AT AT LEAST TEN FOOT INTERVALS

ATTACHMENT C-101  
RELIANT EXPLORATION & PRODUCTION WELL 6-1-F

PROPOSED TD: 2600'

BOP PROGRAM: 0-700' None  
700 – 2600' 9" annular 3000# Ragan Tuaras

Casing: Surface: 8-5/8" OD 24# J55 8rd ST&C new casing set at  
700' 12-1/4" hole Centralizers from TD – Surface, every fourth  
joint

Production: 5 -1/2" OD new casing from 0-2600'  
300' – 15.5# J55 8rd LTC 2300' – 5.9# 10rd FG  
7 -7/8" hole – 5 centralizers

\* This well will have fiberglass casing from the surface down to  
the productive interval (Tubb). Steel casing will be used across the  
Tubb. The fiberglass casing will at a minimum penetrate the  
Cimarron formation, with the optimum setting point being the  
midpoint of the Cimarron formation.

Cement: Surface – Circulate cement with 200sx class C – additives 2# C45,  
weight of 12.4# per gallon. Yield 2.14 and 1/8# of Celaflake per  
sx. Tail Cement 100sx class C 2%CACl with 1/8# per sx  
Celaflake Yield of 1.32# with weight of 14.8# per gallon

Production- Circulate cement with 300sx class C – additives 2#  
C45, weight of 12.4# per gallon. Yield 2.14 and 1/8# of Celaflake  
per sx. Tail Cement 100sx class C 2%CACl with 1/8# per sx  
Celaflake Yield of 1.32# with weight of 14.8# per gallon

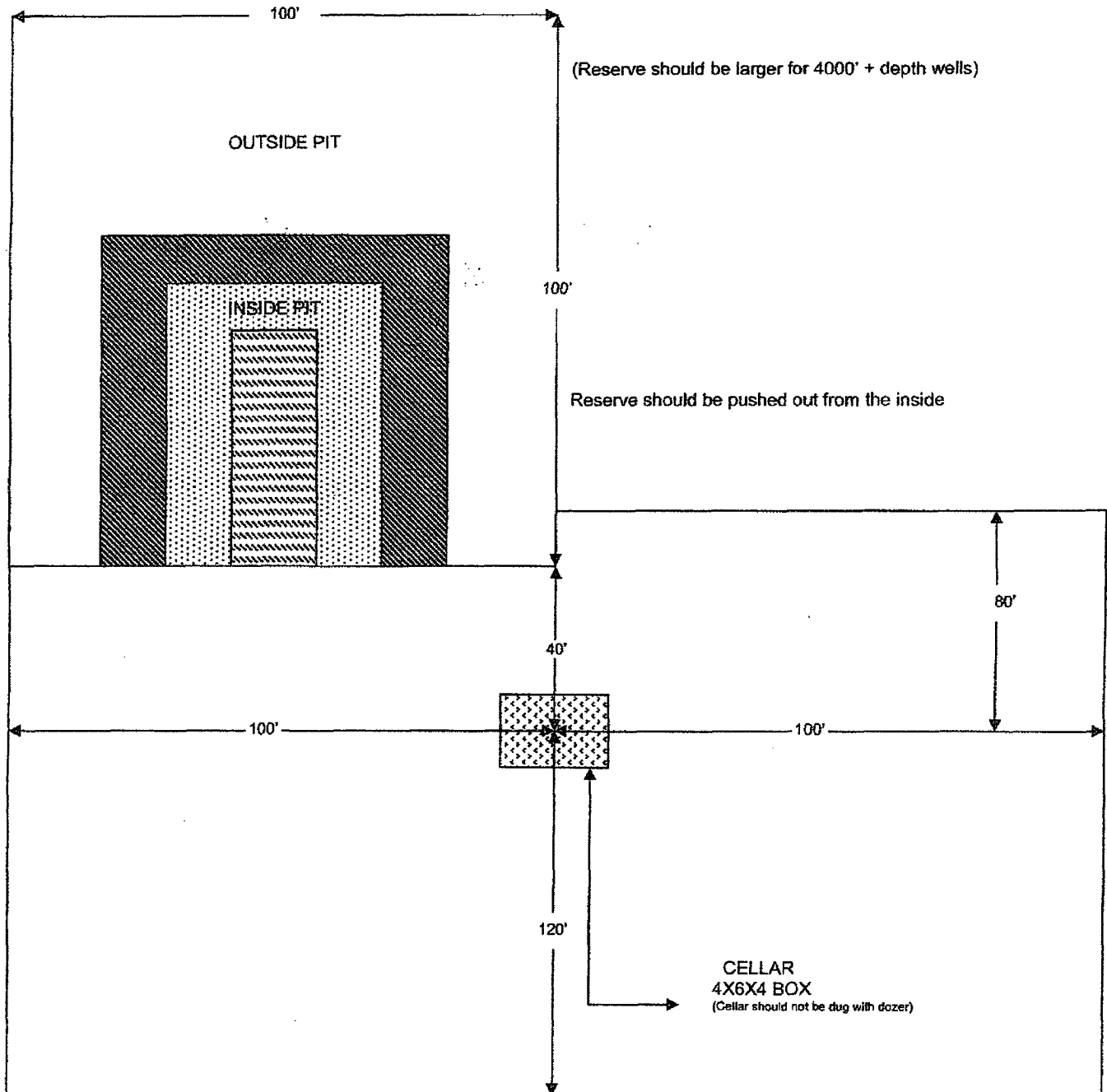
Mud 0-700' Fresh water/native mud. Wt 8.6-9.2ppg,  
Vis 32.-36sec  
700- 2600' Fresh water/ Starch/Gel with ph control as needed.  
Wt 9.0-9.2ppg, Vis 28-29 sec

Utilizing Metal Pits with a 20' by 90' by 6' deep reserve lined pit  
with 12 ply liner.



## LOCATION SPECIFICATION FOR STEEL PITS

(PICTURE NOT TO SCALE)



Cellar can be 4X4X4 if using a screw-on wellhead

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-402  
Revised October 12, 2005  
Submit to Appropriate District Office  
State Lease- 4 Copies  
Fee Lease- 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number <b>30-021-20450</b>	Pool Code <b>96010</b>	Pool Name <b>Bravo Dome</b>
Property Code <b>37025</b>	Property Name <b>LIBBY MINERALS LLC 1931</b>	
OGRID No. <b>251905</b>	Operator Name <b>RELIANT EXPLORATION &amp; PRODUCTION, LLC.</b>	

2008 FEB 11  
RECEIVED  
HARDING

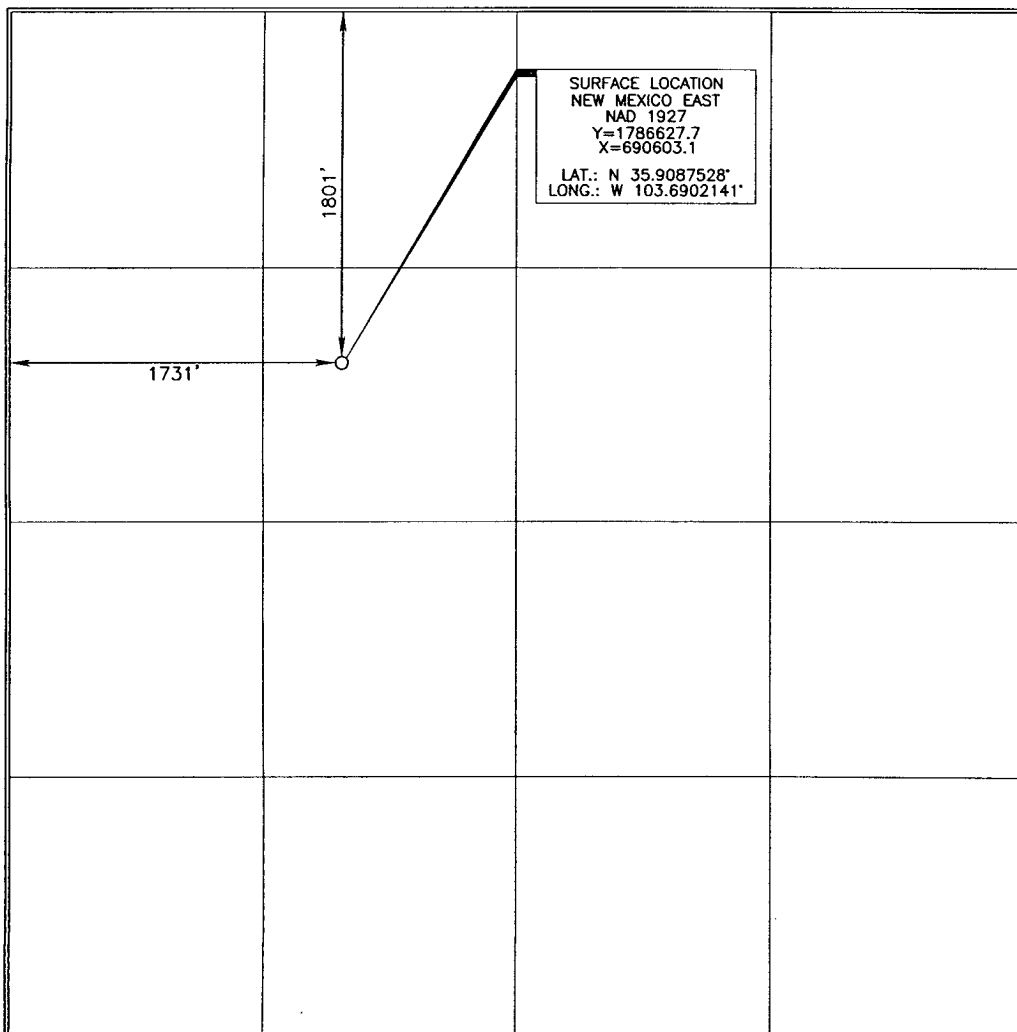
Surface Location

UL or lot no. <b>F</b>	Section <b>6</b>	Township <b>19 NORTH</b>	Range <b>31 EAST, N.M.P.M.</b>	Lot Idn	Feet from the <b>1801'</b>	North/South line <b>NORTH</b>	Feet from the <b>1731'</b>	East/West line <b>WEST</b>	County <b>HARDING</b>
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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		Joint or Infill	Consolidation Code	Order No.					

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



OPERATOR CERTIFICATION

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

*Scott J. Vanderborg*  
Signature Date **2/14/2008**

**Scott J. Vanderborg**  
Printed Name

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.

**DECEMBER 18, 2007**  
Date of Survey

Signature and Seal of  
Professional Surveyor

*Terry J. Abel*  
Certificate Number **15079** Date **2/8/2008**

WO# 071217WL-a (Rev. A) (KA)

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District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources

Form C-144  
June 1, 2004

Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

For drilling and production facilities, submit to  
appropriate NMOCD District Office.  
For downstream facilities, submit to Santa Fe  
office

**Pit or Below-Grade Tank Registration or Closure**

Is pit or below-grade tank covered by a "general plan"? Yes ☐ No ☒

Type of action: Registration of a pit or below-grade tank ☐ Closure of a pit or below-grade tank ☐

Operator: Reliant Exploration & Production, LLC. Telephone: 800-523-5566 e-mail address: vance@reliantgases.com  
Address: 3700 Kermit Highway Odessa, TX 79764  
Facility or well name: Libby Minerals LLC 1931 Well #6-1-F API #: 20450 U/L or Qtr/Qtr F Sec 6 T 19 North R 31 East  
County: Harding Latitude N 35.9087528 Longitude W 103.6902141 NAD: 1927 X ☐ 1983 ☐  
Surface Owner: Federal ☐ State ☐ Private ☒ Indian ☐

Pit	Below-grade tank
Type: Drilling <input checked="" type="checkbox"/> Production <input type="checkbox"/> Disposal <input type="checkbox"/> Workover <input type="checkbox"/> Emergency <input type="checkbox"/> Lined <input checked="" type="checkbox"/> Unlined <input type="checkbox"/> Liner type: Synthetic <input checked="" type="checkbox"/> Thickness <u>12</u> mil Clay <input type="checkbox"/> Pit Volume <u>850</u> bbl	Volume: <u>      </u> bbl Type of fluid: <u>      </u> Construction material: <u>      </u> Double-walled, with leak detection? Yes <input type="checkbox"/> If not, explain why not: <u>      </u>
Depth to ground water (vertical distance from bottom of pit to seasonal high water elevation of ground water.)	Less than 50 feet (20 points) 50 feet or more, but less than 100 feet (10 points) <u>100 feet or more</u> (0 points)
Wellhead protection area: (Less than 200 feet from a private domestic water source, or less than 1000 feet from all other water sources.)	Yes (20 points) <u>No</u> (0 points)
Distance to surface water: (horizontal distance to all wetlands, playas, irrigation canals, ditches, and perennial and ephemeral watercourses.)	Less than 200 feet (20 points) 200 feet or more, but less than 1000 feet (10 points) <u>1000 feet or more</u> (0 points)
Ranking Score (Total Points) 0	

**If this is a pit closure:** (1) Attach a diagram of the facility showing the pit's relationship to other equipment and tanks. (2) Indicate disposal location: (check the onsite box if you are burying in place) onsite ☐ offsite ☐ If offsite, name of facility       . (3) Attach a general description of remedial action taken including remediation start date and end date. (4) Groundwater encountered: No ☐ Yes ☐ If yes, show depth below ground surface        ft. and attach sample results. (5) Attach soil sample results and a diagram of sample locations and excavations.

Additional Comments:

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

Date: 2/19/2008

Printed Name/Title Scott S. Vanderburg / President

Signature Scott Vanderburg

Your certification and NMOCD approval of this application/closure does not relieve the operator of liability should the contents of the pit or tank contaminate ground water or otherwise endanger public health or the environment. Nor does it relieve the operator of its responsibility for compliance with any other federal, state, or local laws and/or regulations.

Approval:

Printed Name/Title DISTRICT SUPERVISOR

Signature Ed Martin

Date: 3/3/08