

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Form C-101
May 27, 2004

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

RECEIVED

Submit to appropriate District Office

AUG 12 2005

☐ AMENDED REPORT

OCU-ARTESIA

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

¹ Operator Name and Address Echo Production, Inc. PO Box 1210, Graham, TX 76450		² OGRID Number 06742
³ Property Code 34361	⁴ Property Name Stiletto '16' State	⁵ API Number 30-015-34243
⁶ Well No. 3		
⁷ Proposed Pool 1 Wildcat : Bone Spring		⁸ Proposed Pool 2

7 Surface Location

UL or lot no.	Section	Township	Range	Lot Idn.	Feet from the	North/South line	Feet from the	East/West line	County
I	16	20S	25E	001	1980	South	900	East	Eddy

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

¹¹ Work Type Code N	¹² Well Type Code oil	¹³ Cable/Rotary rotary	¹⁴ Lease Type Code State	¹⁵ Ground Level Elevation 3445'
¹⁶ Multiple N	¹⁷ Proposed Depth 3500'	¹⁸ Formation Bone Springs	¹⁹ Contractor NA	²⁰ Spud Date ASAP
Depth to Groundwater 100±		Distance from nearest fresh water well 1000' ±		Distance from nearest surface water 1000' ±
Pit: Liner: Synthetic <input checked="" type="checkbox"/> 12 mils thick Clay <input type="checkbox"/> Pit Volume: 1000 bbls Drilling Method: Fresh Water <input checked="" type="checkbox"/> Brine <input type="checkbox"/> Diesel/Oil-based <input type="checkbox"/> Gas/Air <input type="checkbox"/>				
Closed-Loop System <input type="checkbox"/>				

21 Proposed Casing and Cement Program

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
17 1/2"	14"	Conductor	80'	redi-mix	surface
12 1/4"	8 5/8"	24	1400'	635	surface
7 7/8"	5 1/2"	15.50	3500'	633	900'

²² 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.

Echo Production, Inc. proposes to drill to a depth sufficient to test the Bone Springs formation. If productive, 5 1/2" casing will be set. If nonproductive, the well will be plugged and abandoned in a manner consistent with State regulations. A mud program and BOP diagram are attached.

NOTIFY OCD OF SPUD & TIME
TO WITNESS CEMENTING OF
SURFACE CASING

²³ 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 ☐.

OIL CONSERVATION DIVISION

Approved by:

TIM W. GUM

DISTRICT II SUPERVISOR

Printed name: Ken Seligman *Ken Seligman*

Title:

Title: Engineer

Approval Date: AUG 23 2005

Expiration Date: AUG 23 2006

E-mail Address: ken.s@echoproduction.com

Date: 8/8/05

Phone: (940) 549-3292

Conditions of Approval Attached ☐

DISTRICT IV
2040 South Pacheco, Santa Fe, NM 87505

Form C-102
Revised March 17, 1999

Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

2040 South Pacheco
Santa Fe, New Mexico 87505

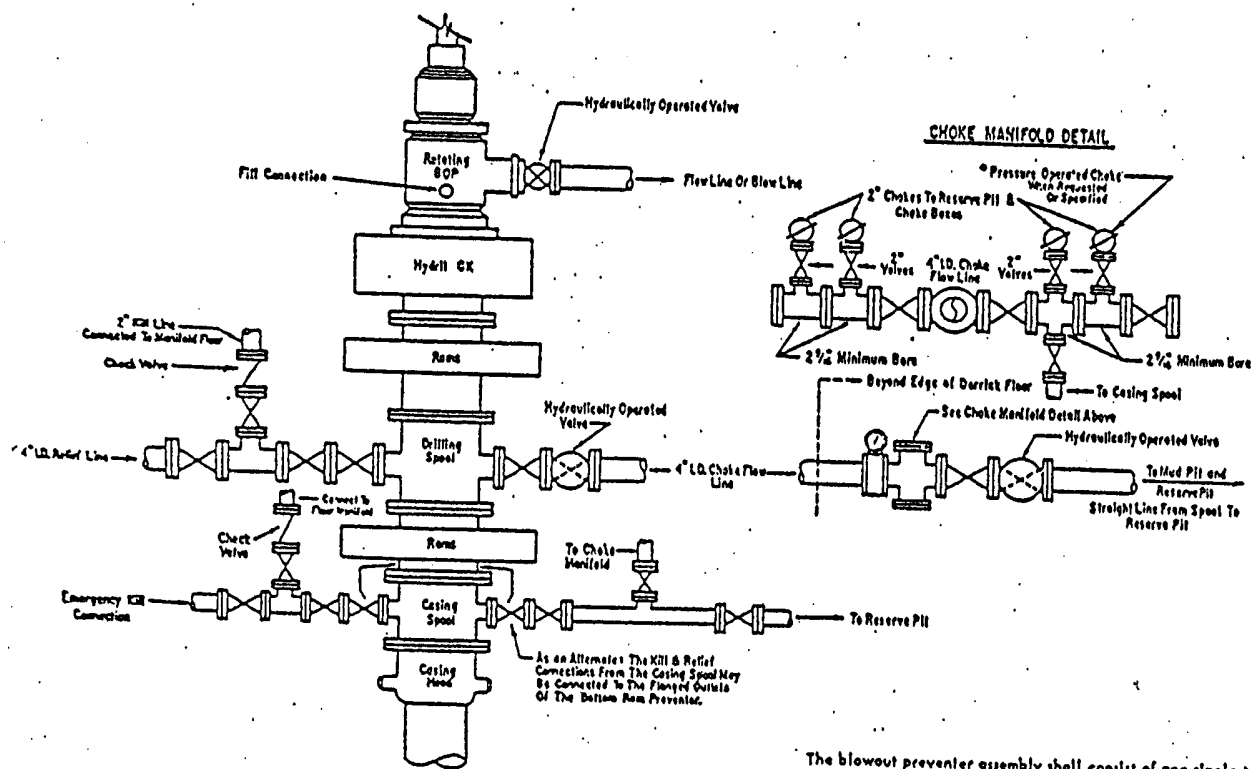
☐ AMENDED REPORT

API Number		Pool Code	Pool Name	
			Wildcat	
Property Code	Property Name			Well Number
	STILETTO "16" STATE			3
OGRID No.	Operator Name			Elevation
06742	ECHO PRODUCTION COMPANY			3445'

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
1	16	20 S	25 E		1980	SOUTH	900	EAST	EDDY

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.					

	<h3 style="text-align: center;">OPERATOR CERTIFICATION</h3> <p><i>I hereby certify the information contained herein is true and complete to the best of my knowledge and belief.</i></p> <hr/> <p style="text-align: right;"><i>Ken Seligman</i></p> <p>Signature _____</p> <p>Ken Seligman Printed Name _____</p> <p>Engineer Title _____</p> <p>6/24/05 Date _____</p> <hr/> <h3 style="text-align: center;">SURVEYOR CERTIFICATION</h3> <p><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></p> <p style="text-align: right;">MAY 17, 2005</p> <p>Date Surveyed _____</p> <p>Signature & Seal of Professional Surveyor _____</p> <div style="text-align: center;"> </div> <p>Certificate No. Cory L. Jones 7977</p> <p style="text-align: center;">BASIN SURVEYS</p>
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3000# PSI WORKING PRESSURE BLOWOUT PREVENTER HOOK-UP

The blowout preventer assembly shall consist of one single type blind ram preventer and one single type pipe ram preventer, both hydraulically operated; a Hydril "GX" preventer; a rotating blowout preventer; valves; chokes and connections, as illustrated. If a tapered drill string is used, a ram preventer must be provided for each size of drill pipe. Casing and tubing rams to fit the preventers are to be available as needed. If correct in size, the flanged outlets of the ram preventer may be used for connecting to the 4-inch I.D. choke flow line and 4-inch I.D. relief line, except when air or gas drilling. All preventer connections are to be open-face flanged.

Minimum operating equipment for the preventers and hydraulically operated valves shall be as follows: (1) Multiple pumps, driven by a continuous source of power, capable of fluid charging the total accumulator volume from the nitrogen precharge pressure to its rated pressure within _____ minutes. Also, the pumps are to be connected to the nitrogen precharge pressure to not less than 750 PSI and connected so as to receive the aforementioned fluid charge. With the charging pumps shut down, the pressurized fluid volume stored in the accumulator must be sufficient to close all the pressure-operated devices simultaneously within _____ seconds; after closure, the remaining accumulator pressure shall be not less than 1000 PSI with the remaining accumulator fluid volume at least _____ percent of the original. (2) When requested, an additional source of power, remote and equivalent, is to be available to operate the above pumps; or there shall be additional pumps operated by separate power and equal in performance capabilities.

The closing manifold and remote closing manifold shall have a separate control for each pressure-operated device. Controls are to be labeled, with control handles indicating open and closed positions. A pressure reducer and regulator must be provided for operating the Hydril preventer. When requested, a second pressure reducer shall be available to limit operating fluid pressures to ram preventers. Gulf Legion No. 38 hydraulic oil, an equivalent or better, is to be used as the fluid to operate the hydraulic equipment.

The choke manifold, choke flow line, relief line, and choke lines are to be supported by metal stands and adequately anchored. The choke flow line, relief line, and choke lines shall be constructed as straight as possible and without sharp bends. Easy and safe access is to be maintained to the choke manifold. If deemed necessary, walkways and stairways shall be erected in and around the choke manifold. All valves are to be selected for operation in the presence of oil, gas, and drilling fluids. The choke flow line valves and relief line valves connected to the drilling spool and all ram type preventers must be equipped with stem extensions, universal joints if needed, and hand wheels which are to extend beyond the edge of the derrick substructure. All other valves are to be equipped with handles.

* To include derrick floor mounted controls.

EXHIBIT "A"

EQUIPMENT DESCRIPTION

All equipment should be at least 3,000 psi WP or higher unless otherwise specified.

1. Bell nipple
2. Hydril bag type preventer
3. Ram type pressure operated blowout preventer with blind rams.
4. Flanged spool with one 3" and one 2" (minimum) outlet.
5. 2" (minimum) flanged plug or gate valve.
6. 2"x 2"x 2" (minimum) flanged.
7. 3" gate valve.
8. Ram type pressure operated blowout preventer with pipe rams.
9. Flanged type casing head with one side outlet.
10. 2" threaded (or flanged) plug or gate valve. Flanged on 5000# WP, threaded on 3000# WP or less.
11. 3" flanged spacer spool.
12. 3"x 2"x 2"x 2" flanged cross.
13. 2" flanged plug or gate valve.
14. 2" flanged adjustable choke.
15. 2" threaded flange.
16. 2" XXH nipple.
17. 2" forged steel 90° Ell.
18. Cameron (or equal) threaded pressure gauge.
19. Threaded flange.
20. 2" flanged tee.
21. 2" flanged plug or gate valve.
22. 2 1/2" pipe, 300' to pit, anchored.
23. 2 1/2" SE valve.
24. 2 1/2" line to steel pit or separator.

NOTES:

- 1). Items 3, 4 and 8 may be replaced with double ram type preventer with side outlets between the rams.
- 2). The two valves next to the stack on the fill and kill line to be closed unless drill string is being pulled.
- 3). Kill line is for emergency use only. This connection shall not be used for filling.
- 4). Replacement pipe rams and blind rams shall be on location at all times.
- 5). Only type U, LSW and QRC ram type preventers with secondary seals are acceptable for 5000 psi WP and higher BOP stacks.
- 6). Type E ram-type BOP's with factory modified side outlets may be used on 3000 psi or lower WP BOP stacks.

Echo Production, Inc.

P.O. Box 1210

Graham, Texas 76450

940/549-3292

Fax: 940/549-5162

8-5-05

Bryan Arrant
New Mexico Oil Conservation Division
1301 W. Grand Ave.
Artesia, N.M. 88210

RECEIVED
AUG 12 2005
OCD-ARTESIA

Re: Submission of supplemental information
Stiletto '16' State #3

Dear Mr. Arrant,

Application for a permit to drill for the above well was previously submitted. You contacted our office requesting the following revisions:

- 1) The casing program be revised to set surface or an intermediate string at 1400'
- 2) Inclusion of a diagram of the BOP configuration to be used.
- 3) A letter statement regarding the expected absence of H₂S
- 4) Formation objective changed to Bone Springs

Please find these changes and or enclosures. Let me know if you require anything else and thanks for your help.

Regards,

Ken Seligman
Ken Seligman
Petroleum Engineer

Echo Production, Inc.

P.O. Box 1210

Graham, Texas 76450

940/549-3292

Fax: 940/549-5162

8-5-05

Bryan Arrant
New Mexico Oil Conservation Division
1301 W. Grand Ave.
Artesia, N.M. 88210

RECEIVED
AUG 12 2005
OCD-ARTESIA

Re: Stiletto '16' State #3
Expected Absence of H2S

Dear Mr. Arrant,

In regard to the enclosed application to drill for the subject well, it is expected that there will be no potentially hazardous volumes of H₂S (As defined by rule 18 of the Oil and Gas Table of rules). This will be our 5th well drilled in this area, and to date, no hazardous volumes of H₂S have been encountered.

Regards,

Ken Seligman
Ken Seligman
Petroleum Engineer

INTERVAL: 0 - 360		12.25" hole	2 days	8.625" csg	1 drill bits		
Product	Function		Treatment	Unit Size	Usage	Unit Price	Total Price
Bentonite	Viscosifier		10-12 ppb	100 #	70	\$7.19	\$503.30
Cedar Fiber/Fiber Plug	LCM, sealant		10-20 ppb in pills	40 #	30	\$5.01	\$150.30
Ground Paper	Seepage and sweeps		1-3 sacks per 100 feet	40 #	35	\$6.50	\$227.50
Lime	pH additive, flocculant		1 sack per 15 sacks of bentonite	50 #	10	\$4.32	\$43.20
Maxi-Seal	LCM, sealant		10-20 ppb in pills	40 #	30	\$8.45	\$253.50
Plastic	Storage aid		Cover mud	1 roll	1	\$48.75	\$48.75
Interval Total:						<u>\$1,226.55</u>	

Projected Mud Properties

Depth	Mud Wt. - ppg	Viscosity	Filtrate	pH	Solids - % by vol.
0' - 360'	8.4-9.4 Fresh Water	32-34	N/C	10.0	3-8

General Geological Data

Tops/Bases	Formation	Lithology	Notes/Challenges
0' - 200'	Quaternary	Sand, limestone, gypsum, conglomerates	Seepage
200' - 360'	Tansill	Limestone, sand stringers, surface conglomerates	Vugular, fractured, heavy seepage, lost circulation

Interval Notes for 0 - 360

Spud with a conventional Fresh Water and Bentonite slurry. Maintain the viscosity as needed to clean the large diameter hole. Small amounts of Lime may be added to flocculate the gel for added carrying capacity. Use Fresh Water additions for dilution to keep solids to a minimum. Ground Paper should be used periodically to sweep the hole to control seepage and enhance hole cleaning. Total losses may be expected. We suggest dry drilling to total depth sweeping the hole as necessary with viscous (40-50) Bentonite pills containing 10-20 ppb of various LCM's to keep hole clean and to regain returns.

INTERVAL: 360 - 3,500		7.875" hole	5 days	5.5" csg	1 drill bits		
Product	Function		Treatment	Unit Size	Usage	Unit Price	Total Price
Bentonite	Hole sweep		12-14 ppb in sweeps	100 #	80	\$7.19	\$575.20
Cedar Fiber/Fiber Plug	LCM, sealant		10-20 ppb in pills	40 #	30	\$5.01	\$150.30
Ground Paper	Seepage and sweeps		1-3 sacks per 100 feet	40 #	30	\$6.50	\$195.00
Lime	pH additive		.5 ppb	50 #	40	\$4.32	\$172.80
Maxi-Seal	LCM, sealant		10-20 ppb in pills	40 #	30	\$8.45	\$253.50
MF-55/VisPlus(non-ionic)	Hole sweep, flocculant		1 qt down drill pipe for sweep	5 gal.	2	\$94.25	\$188.50
Salt Gel			10-20 ppb in sweeps	50 #	40	\$7.14	\$285.60
Yellow Starch			3-4 ppb close to total depth	50 #	60	\$13.06	\$783.60
Interval Total:						\$2,604.50	

Projected Mud Properties

Depth	Mud Wt. - ppg	Viscosity	Filtrate	pH	Chlorides - ppm
360' - 1,400'	8.4-8.5	28	N/C	10.0	5-15K
1,400' - 2,300'	8.8-9.2 <i>Fresh Water</i>	28	N/C	10.0	15k-80k <i>Fresh Water</i>
2,300' - 3,500'	8.8-9.2	30-32	30-20	10.0	15k-80k

General Geological Data

Tops/Bases	Formation	Lithology	Notes/Challenges
360' - 400'	Tansill	Limestone, sand stringers, surface conglomerates	Vugular, fractured, heavy seepage, lost circulation
400' - 790'	Yates	Sand w/red shale & anhydrite stringers	
790' - 2,400'	San Andres	Limestone	Vugular, fractured, heavy seepage, lost circulation
2,400' - 2,600'	Glorieta	Limestone	
2,600' - 3,350'	Yeso	limestone w/dolomite and shale stringers	
3,350' - 3,500'	Bone Spring	Limestone w/sand stringers	Seepage

Interval Notes for 360 - 3,500

Drill out with Fresh Water circulating the reserve. Adjust the pH to 10.0 with Lime. Continue to use Ground Paper additions to control seepage and aid in hole cleaning. Severe losses may occur in the interval. Should total losses occur, dry drill sweeping the hole with viscous (40-50) Bentonite pills containing 10-20 ppb of various LCM's to aid in hole cleaning and possibly regaining returns. Sweep and spot a viscous pill at total depth to ensure a stable well bore for casing operations.

NOTE: some salt stringers may be present below 1,400'. We suggest allowing the chloride increase to occur, maintaining the weight as necessary

Use Salt Gel sweeps if necessary to clean the hole as the fluid salts up. 100' prior to TD add 50-60 sks of Yellow Starch to clean/prepare the hole for running pipe.

District I
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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: <u>Echo Production, Inc.</u> Telephone: <u>940-549-3292</u> mail address: <u>ken.s@echoproduction.com</u>		
Address: <u>PO Box 1210, Graham, TX 76450</u>		
Facility or well name: <u>Stiletto 16 State #3</u> API #: _____ U/L or Qtr/Qtr <u>I</u> Sec <u>16 T 20S R 25E</u>		
County: <u>Eddy</u> Latitude <u>N32°34'</u> Longitude <u>W104°29'</u> NAD: 1927 <input type="checkbox"/> 1983 <input type="checkbox"/> Surface Owner Federal <input type="checkbox"/> State <input checked="" type="checkbox"/> Private <input type="checkbox"/> Indian <input type="checkbox"/>		
17.8" 02.9"		
Pit 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>10000</u> bbl	Below-grade tank Volume: _____ bbl Type of fluid: _____ Construction material: _____ Double-walled, with leak detection? Yes <input type="checkbox"/> If not, explain why not: _____	RECEIVED JUN 30 2005 OCD-ARTESIA
Depth to ground water (vertical distance from bottom of pit to seasonal high water elevation of ground water.)	Less than 50 feet 50 feet or more, but less than 100 feet 100 feet or more X	(20 points) (10 points) (0 points) 0
Wellhead protection area: (Less than 200 feet from a private domestic water source, or less than 1000 feet from all other water sources.)	Yes No X	(20 points) (0 points) 0
Distance to surface water: (horizontal distance to all wetlands, playas, irrigation canals, ditches, and perennial and ephemeral watercourses.)	Less than 200 feet 200 feet or more, but less than 1000 feet 1000 feet or more X	(20 points) (10 points) (0 points) 0
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: 6/27/05
Printed Name/Title Ken Seligman / Engineer Signature Ken Seligman

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: [Signature] Signature [Signature] Date: JUN 30 2005
Printed Name/Title _____

Echo Production, Inc.

PO Box 1210 Graham, Texas 76450 (940) 549-3292 Fax: (940) 549-5162

**Stiletto '16' State #3
1980' FSL & 900' FEL
Section 16 T20S R25E
Eddy County, New Mexico**

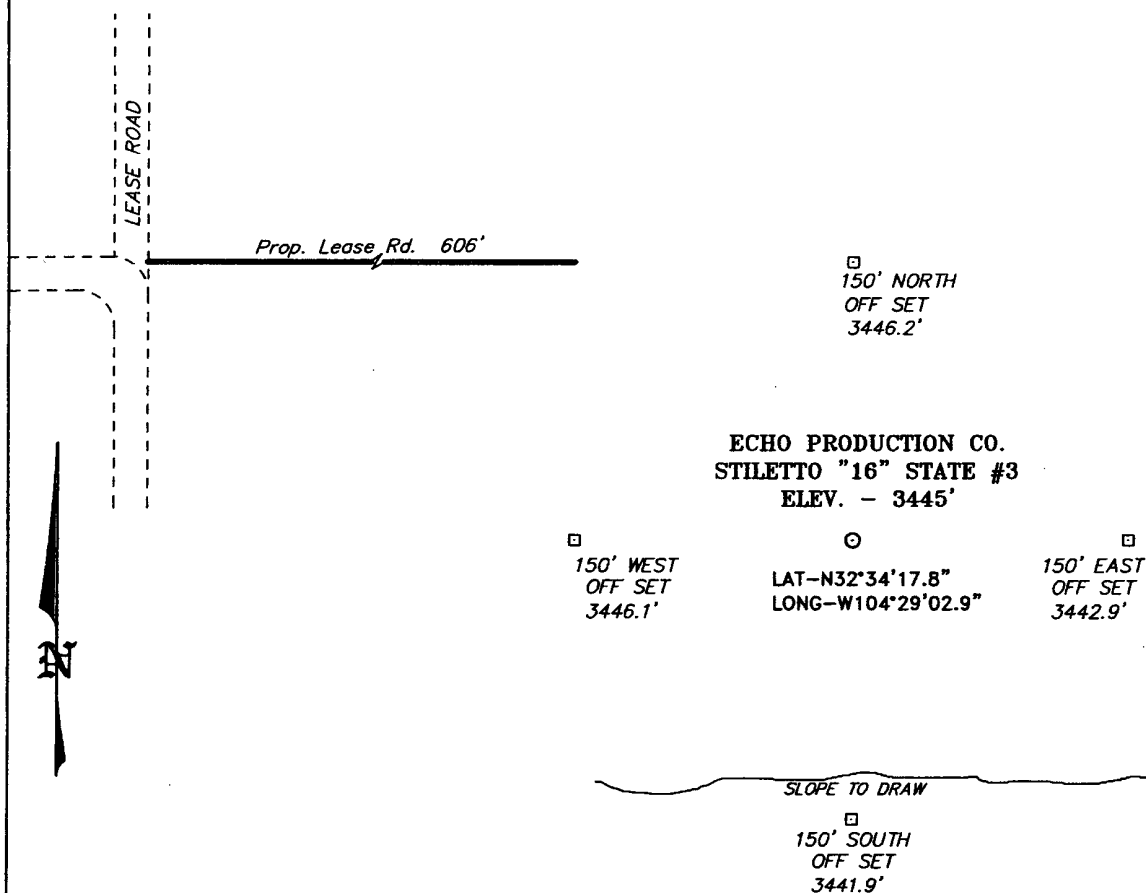
Attached is a drilling fluids summary for the subject well. A fresh water system will be utilized.

Echo has drilled three offset wells which did not show any abnormally pressured zones. Sufficient mud weights will be utilized to eliminate any flow from the well. A double ram type blowout preventor will be utilized and tested after setting surface casing.

H₂S detection and safety equipment will be utilized and all rig personnel will receive safety training by a qualified H₂S safety instructor as to the following:

- A. Characteristics of H₂S
- B. Physical effects and hazards
- C. Proper use of safety equipment and life support systems
- D. Principle and operation of H₂S detectors
- E. Evacuation procedure, routes and first aid
- F. Proper use of air pack

SECTION 16, TOWNSHIP 20 SOUTH, RANGE 25 EAST, N.M.P.M.,
EDDY COUNTY, NEW MEXICO.



DIRECTIONS TO LOCATION:

FROM THE JUNCTION OF CO. RD. 27(PICKETT ROAD) AND
WHITE PINE ROAD, GO NORTH ON PICKETT ROAD FOR 0.4
MILE TO PROPOSED LEASE ROAD.

BASIN SURVEYS P.O. BOX 1786-HOBBS, NEW MEXICO

W.O. Number: 5417 Drawn By: K. GOAD

Date: 05-23-2005 Disk: KJG CD#4 - 5417A.DWG

100 0 100 200 FEET

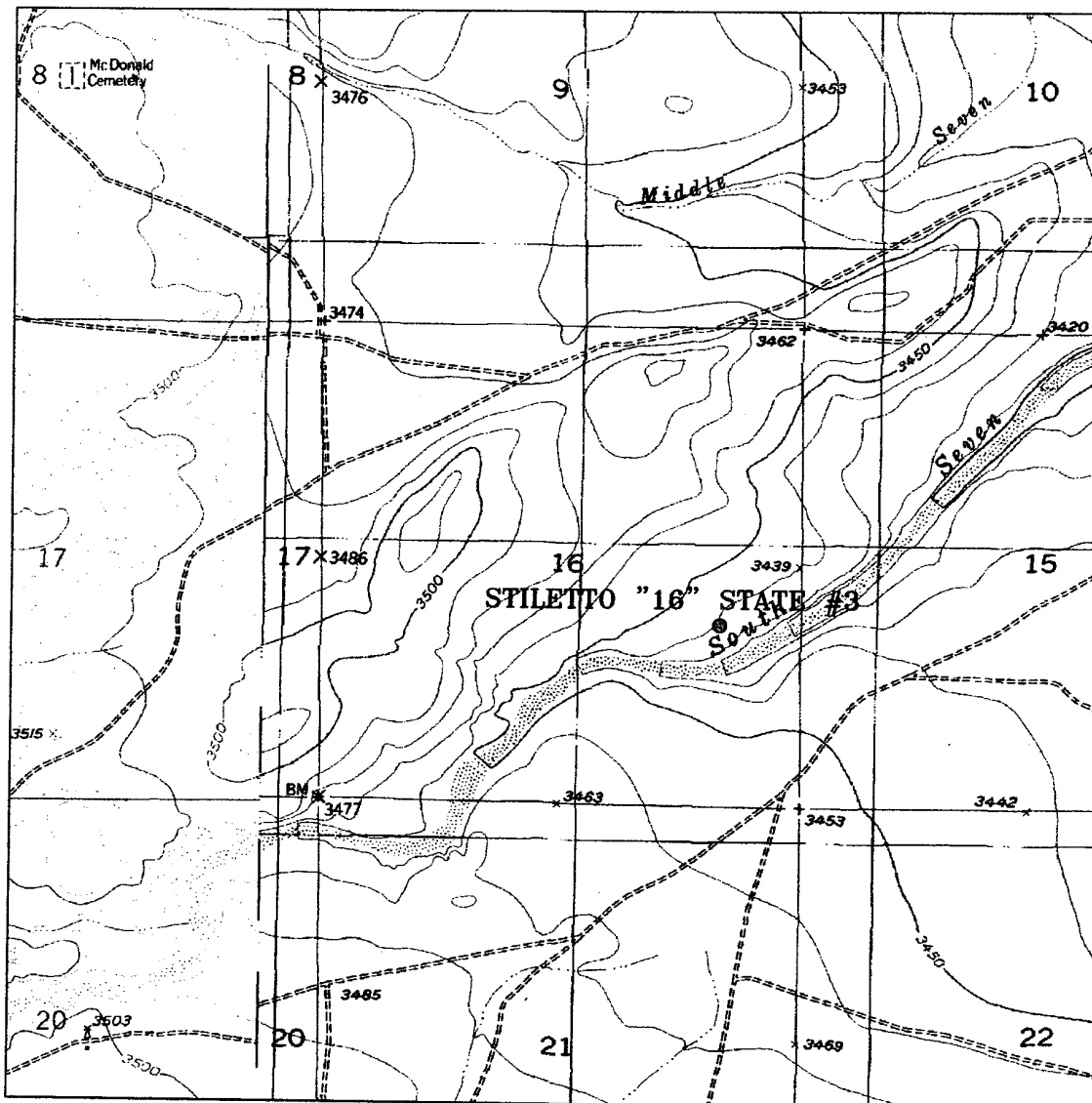
SCALE: 1" = 100'

ECHO PRODUCTION CO.

REF: STILETTO "16" STATE No. 3 / Well Pad Topo

THE STILETTO "16" STATE No. 3 LOCATED 1980' FROM
THE SOUTH LINE AND 900' FROM THE EAST LINE OF
SECTION 16, TOWNSHIP 20 SOUTH, RANGE 25 EAST,
N.M.P.M., EDDY COUNTY, NEW MEXICO.

Survey Date: 05-17-2005 Sheet 1 of 1 Sheets



STILETTO "16" STATE #3

Located at 1980' FSL and 900' FEL
Section 16, Township 20 South, Range 25 East,
N.M.P.M., Eddy County, New Mexico.

basin
surveys
focused on excellence
in the oilfield

P.O. Box 1786
1120 N. West County Rd.
Hobbs, New Mexico 88241
(505) 393-7316 - Office
(505) 392-3074 - Fax
basinsurveys.com

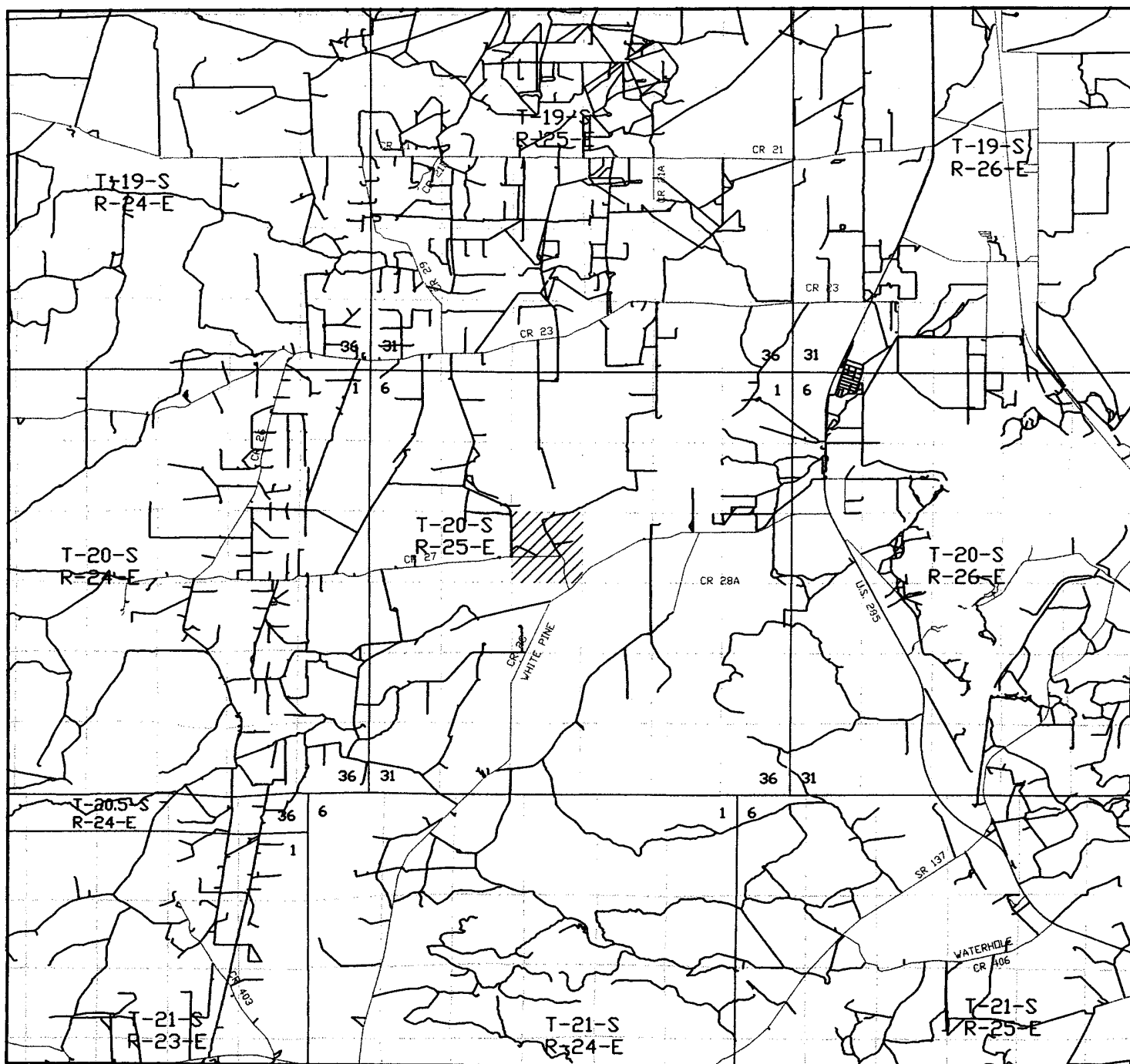
W.O. Number: 5417AA - KJG CD#5

Survey Date: 05-17-2005

Scale: 1" = 2000'

Date: 05-23-2005

ECHO
PRODUCTION
COMPANY



STILETTO "16" STATE #3
 Located at 1980' FSL and 900' FEL
 Section 16, Township 20 South, Range 25 East,
 N.M.P.M., Eddy County, New Mexico.

basin
surveys
 focused on excellence
 in the oilfield

P.O. Box 1786
 1120 N. West County Rd.
 Hobbs, New Mexico 88241
 (505) 393-7316 - Office
 (505) 392-3074 - Fax
 basinsurveys.com

W.O. Number: 5417AA - KJG CD#5

Survey Date: 05-17-2005

Scale: 1" = 2 MILES

Date: 05-23-2005

ECHO
PRODUCTION
COMPANY