

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

Submit to appropriate District Office

CONFIDENTIAL

☐ AMENDED REPORT

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

¹ Operator Name and Address SWEPI LP, P.O. Box 576, Houston, Texas 77001 (Local Contact: Shell Exploration & Production Company, 4582 S. Ulster St. Pkwy., Suite 1400, Denver, CO 80237)		² OGRID Number 250036
³ Property Code 37165		⁴ API Number 30-019-20136
⁵ Property Name Singleton Properties LLC		⁶ Well No. Latigo 2-34
⁹ Proposed Pool 1		¹⁰ 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
F	34	10N	23E		1880+/-	North	1946+/-	West	Guadalupe

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 OG	¹³ Cable/Rotary R	¹⁴ Lease Type Code P	¹⁵ Ground Level Elevation 4716.2 graded
¹⁶ Multiple N	¹⁷ Proposed Depth 13,000 13,350	¹⁸ Formation Mississippian	¹⁹ Contractor Nabors Drilling	²⁰ Spud Date August 1, 2008
Depth to Groundwater ~900 feet (Santa Rosa aquifer)		Distance from nearest fresh water well ~2 miles (CD-1 water well)		Distance from nearest surface water ~2400 feet (unnamed ephemeral drainage)
Pit: Liner: Synthetic <input checked="" type="checkbox"/> 20 mils thick Clay <input type="checkbox"/> Pit Volume: 84,430 bbls Drilling Method: Fresh Water 0-1,300', Brine 1,300'-13,500'				
Closed-Loop System <input type="checkbox"/> Fresh Water <input checked="" type="checkbox"/> Brine <input checked="" 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
30-inch	20-inch	Conductor	90-feet	NA	0 feet
14.75-inch	10.75-inch	40.5 lbs.	1300-feet	930	0 feet
9.875-inch	7.625-inch	29.7 lbs.	6200-feet	1257	1000 feet
6.5-inch	4.5-inch	13.5 & 15.1 lbs.	13350-feet	359	5700 feet

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.
See Attachment A - Latigo 2-34 Drilling & Completion Plan

Attachment A3 - Nabors B.O.P. Stack Diagram
See Attachment B - Latigo 2-34 Surface Use Plan
See Attached Maps
Location Photos
Well Location, Latigo 2-34
Location Layout for Latigo 2-34
Topographic Map A
Topographic Map B

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

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

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 NMOC guidelines ☒ a general permit ☐ or an (attached) alternative OCD-approved plan ☐.

Signature: *Michael L. Bergstrom*

Printed name: Michael L. Bergstrom

Title: Regulatory Coordinator

E-mail Address: michael.bergstrom@shell.com

Date: 5/9/2008

Phone: 303.222.6347

OIL CONSERVATION DIVISION


Approved by:

Title:

Approval Date: 5/15/08

Expiration Date: 5/15/10

Conditions of Approval Attached ☐



New Mexico Energy, Minerals and Natural Resources Department

Bill Richardson
Governor

Joanna Prukop
Cabinet Secretary
Reese Fullerton
Deputy Cabinet Secretary

Mark Fesmire
Division Director
Oil Conservation Division



Mr. Michael L. Bergstrom
Shell Exploration & Production Co.
Regulatory Affairs-EP Americas
4582 S. Ulster Way Parkway
Suite 1400
Denver, Colorado 80237

May 15, 2008

Subject: Applications for Permit to Drill (APD)
Shell Exploration & Production Co., Latigo 2-34 and Latigo 3-5
Guadalupe County, New Mexico

Dear Mr. Bergstrom:

Enclosed are the approved APD's for the above-captioned wells. Be advised that the New Mexico Oil Conservation Division (NMOCD) will not hold form C-101, form C-102 or form C-144, nor any attachments to these forms, confidential for any period of time. NMOCD rules allow only Well Completion or Recompletion Reports (Form C-105) and logs to be held confidential for a period of 90 days from date of completion of the well. Please see NMOCD Rule 19.15.13.1105.

The application to drill for the Webb 3-23 well has been forwarded to you separately.

Please contact me if you have any questions.

NEW MEXICO OIL CONSERVATION DIVISION



Ed Martin
District Supervisor



Latigo 2-34 Drilling and Completion Plan

The well will be drilled with potable (TDS<3,000 ppm) water-based fluids from surface to the bottom of the Santa Rosa Formation ("freshwater aquifer"). Surface conductor and intermediate casing strings will be installed and cemented. Below the Santa Rosa Formation, the well will be drilled with nonpotable (TDS>10,000 ppm) water-based fluids to total vertical depth (TVD). Additional intermediate casing strings and production casing will be installed and cemented. Upon completion of drilling, the casing will be perforated in selected prospective zones. Hydraulic fracturing will be performed in the prospective zones, and gas and water flow testing will be conducted in individual and/or commingled zones.

Drilling Program

- Lithology
 - Tucumcari Basin
 - This area has been the subject of limited oil & gas exploration activity
 - Approximate depths of key geologic formations are shown in Attachment A1
 - Prospective formations are in the Pennsylvanian section
- Fluid Bearing Formations
 - Potable water (Surface – 1500 feet below ground surface)
 - Brackish water (1500+ feet below ground surface)
 - Natural gas/condensate (~8000+ feet below ground surface)
- Drilling Fluids
 - Freshwater drilling fluids (see Attachment A2)
 - Potable (TDS< 3,000 ppm) water-based, 8.3-8.6 ppg, viscosifiers and LCM additives
 - Brackish water drilling fluids (see Attachment A2)
 - Non-potable (TDS>10,000 ppm) water-based fluids, 8.6-10.0 ppg, salt, lime, caustic soda, viscosifiers and LCM additives
 - Lost Circulation Materials (LCM)
 - As needed, LCM consisting of, but not limited to, cedar fibers, mica, drilling paper, graphite, walnut plug, cottonseed hulls and calcium carbonate may be introduced into the well bore to address any lost circulation zones encountered during drilling
- Wellhead Pressure Control (Blowout Prevention [BOP])
 - Wellhead BOP equipment is standard design for "tight gas" wells, as shown on Attachment A3
 - Maximum pressures for equipment (wellhead A section to be 11" 5,000 psi; wellhead B section to be 11" 10,000 psi; BOP with 11" 5,000 psi annular preventer; and Ram preventers with 11" 10,000 psi)
 - Maximum downhole pressures anticipated ~6500 psi.
 - BOP testing procedures conducted by third party contractor upon installation
 - Ram preventers to 10,000 psi and 250 psi; Annular preventer to 2500 psi and 250 psi, for 10 minutes and 5 minutes, respectively

Casing and Cementing Program

- All casing run and set will be new and unused. Details are included Table 1
- Surface Casing
 - 14.75-inch diameter well bore, drilled to 1300 feet.
 - 10.75-inch diameter casing installed and cemented to surface
- Intermediate Casing
 - 9.875-inch diameter well bore, drilled to 6200 feet.
 - 7.625-inch diameter casing installed and cemented to 1000 feet
- Production Casing
 - 6.5-inch diameter well bore, drilled to 13350 feet.
 - 4.5-inch diameter casing installed and cemented to 5700 feet

Well Completion

- Casing Perforation
 - Perforate casing in prospective sand zones, using three shots per foot (spf), 120 degree, phased perforating guns
- Hydraulic Fracturing
 - Treat prospective sand zones with ceramic and/or sand proppant materials during hydraulic fracturing

Logging and Testing

- Lithologic Logging
 - Mudlogging (to TVD); Selective coring (whole and/or rotary sidewall)
- Wireline-Logging, including but not limited to:
 - Gamma Ray, Resistivity, Porosity, Neutron and Sonic data collection
- Flow Testing
 - Flow individual production zones for up to 3 days
 - Flow entire well for up to 120 days

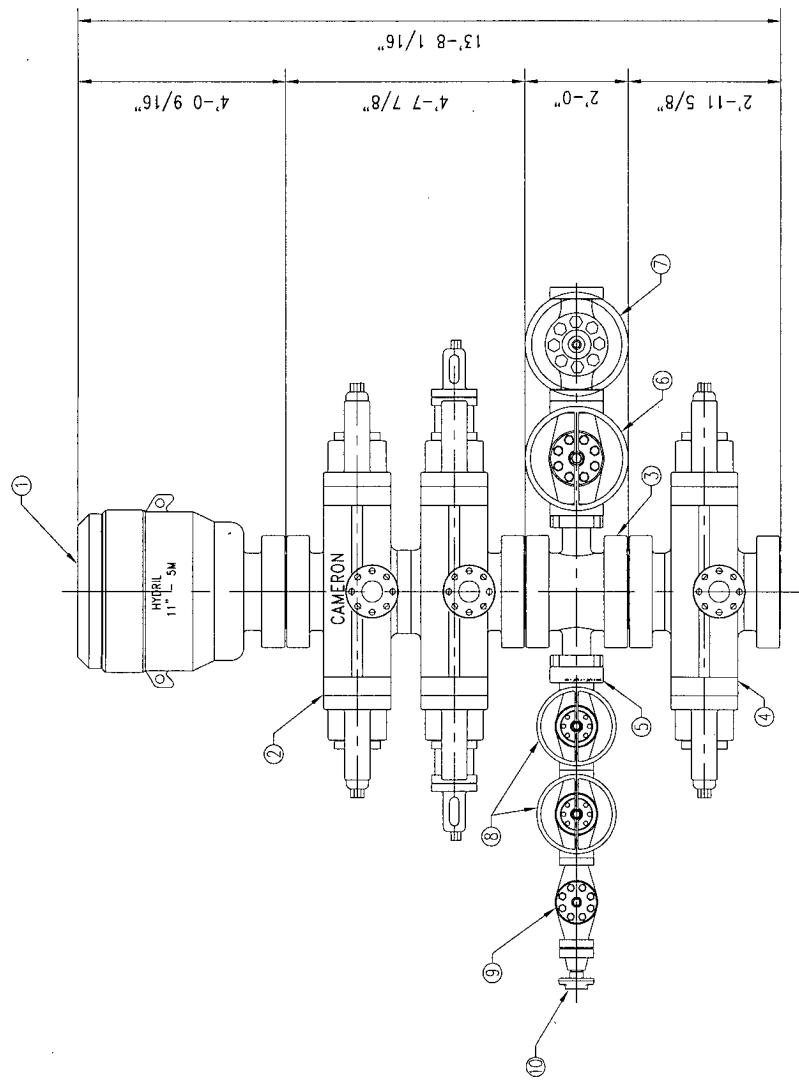
Water Supply for Drilling and Completions

- One water well (minimum 5 ½-inch and maximum 7-inch diameter casing) will be drilled on-site about 500 feet east of the well location, on the edge of the well site
 - A temporary appropriation of up to 3 acre feet (AF) of potable water will be obtained from the Office of State Engineer-District 6 (OSE) for production of potable water from the Santa Rosa aquifer
- Potable groundwater will be available from the CD-1 water well located on the Webb Ranch, about 3 miles from the well site
 - A temporary appropriation of up to 3 acre feet (AF) of potable water was previously approved by the Office of State Engineer-District 6 (OSE) for production of potable water from the Santa Rosa aquifer. This appropriation will expire in August 2008, and will be renewed with the OSE.
- Potable groundwater will be available from wells located on the Pajarito Ranch, about 22 miles from the well site
 - Parajito Creek Ranch holds appropriations for more than 500 acre feet (AF) of potable groundwater, which may be sold for any and all uses.
- Nonpotable produced water will be available from the CD-1 well located on the Webb Ranch, about 3 miles from the well site
 - Produced water from the completion and testing of CD-1 well is currently stored, and may be treated and re-used at other well locations

BILL OF MATERIALS	
NO.	QTY
DESCRIPTION	
1	1
11" 5M GK SCREW HEAD ANNULAR B.O.P.	
2	1
11" 10M TYPE U DOUBLE B.O.P. C/W 4 OFF	
4 1/16" 10M FLANGED OUTLETS	
3	1
11" 10M DRILL SPOOL FLG. x FLG. CW 2 OFF	
4 1/16" 10M FLANGED OUTLETS, 24" FACE TO FACE	
4	1
11" 10M TYPE U SINGLE B.O.P. C/W 2 OFF	
4 1/16" 10M FLANGED OUTLETS (2)	
5	1
DSA 4 1/16" 10M x 2 1/16" 10M	
6	1
4 1/16" 10M MANUAL VALVE	
7	1
4 1/16" 10M HCR VALVE	
8	2
2 1/16" 10M MANUAL VALVE	
9	1
2 1/16" 10M CHECK VALVE	
10	1
2 1/16" 10M x 2" 1502 ADAPTER	

NOTES:
 1. VALVE SEQUENCE FOR BOP STACK
 MOUNTED CHOKE LINE VALVES IS
 OPTIONAL (ITEMS 6 AND 7).

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ELEVATION

TITLE: COPYRIGHTED		RIG PAGE 750	
B.O.P. STACK 11"-10M		B	
THIS DRAWING IS SHOWN TRUE SCALE ONLY WHEN PRINTED ON THIS SIZE PAPER		ER:	P-750
DRW BY:	EES	SCALE:	NONE
DATE:	11/21/2005	APP:	
ER DWG:		ER DWG:	755-404

ISSUED FOR INFORMATION ONLY		02/07/07		EES		PB	
REV.	DESCRIPTION	DATE	BY	DATE	BY	DATE	BY
0							

THIS DRAWING AND THE INFORMATION CONTAINED HEREIN IS CONFIDENTIAL AND PROPRIETARY. IT IS TO BE KEPT IN STRICTLY CONFIDENTIAL AND NOT TO BE REPRODUCED OR USED FOR ANY PURPOSE WITHOUT THE WRITTEN CONSENT OF NABORS INDUSTRIES.

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Latigo 2-34 Surface Use Plan

The well location, associated facilities and access roads will be constructed on fee surface, upon approval of the surface owner. Well site and access roads will be constructed to withstand the loads occurring during mobilization, placement and operation of drilling, completion and testing equipment. Construction activities will be conducted to minimize surface disturbances and to readily accommodate reclamation activities on disturbed areas.

Existing Roads

- Access to Location
 - From the town of Cuervo, New Mexico
 - Drive north on County Road, about 5.9 miles (Topographic Map A)
 - Follow Pipeline Corridor road west toward Webb CD-1 well location, about 2.6 miles (Topographic Map A)
 - Follow Webb Ranch road north toward Webb CD-1 well location, about 2.2 miles (Topographic Map A)
 - From Webb Ranch road, turn west, follow improved two track road west, south and west, about 1.5 miles, to Latigo 2-34 well location (Topographic Map B)

Roads to be Constructed/Maintained

- Improved Roads
 - County Road (maintained by Guadalupe County)
 - Constructed of compacted crushed aggregate and fill
- Two-Track Roads
 - Latigo Ranch and Webb Ranch Roads
 - Existing improved 2-Track road extends to Webb CD-1 well location
 - Constructed of compacted crushed aggregate and fill
 - Culverts and/or rock-filled, low water crossings installed
 - Construct improved 2-Track road segments: (1) along Pipeline Corridor, and (2) extending to Latigo 2-34 well location
 - Grade/crown road, placing crushed aggregate, as needed
 - Install culverts and/or rock-filled, low water crossings, as needed

Well Site Layout

- Well pad location and associated facilities are shown on Well Location, Latigo Ranch 2-34, Topographic Map A, and Topographic Map B
 - The staked well location and proposed access road are shown on Location Photos
 - Well location, water well, access roads, lined pits, above-ground tanks and temporary buildings, and storage areas are shown on Location Layout for Latigo Ranch 2-34

Water Supply

- Water well will be drilled at a location about 500 feet south of the well location, on the edge of the well site (Location Layout for Latigo Ranch 2-34)

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Existing Oil & Gas Wells

- Webb CD-1 well (API 30-019-20134) is located in SE1/4, SW1/4, Section 25, T11N, R23E
 - Well is temporarily abandoned (19.15.13.1105.C)

Existing and/or Proposed Facilities

- Well Site Facilities
 - Located at well site at approximate locations shown on Location Layout for Latigo Ranch 2-34
- Temporary living quarters
 - Located at well site initially, possibly moved to other, more centrally located area in the near future

Storm Water Management Plan

- Stormwater management and erosion control practices will be implemented during construction, operations and reclamation
 - in compliance with Storm Water Prevention Plan (SWPP), approved by the New Mexico Department of Environment (NMED)

Waste Management and Disposal

- Drilling fluids and cuttings and other solids will be dried on-site and buried on-site during lined pit closure and reclamation
- Other solid wastes will be accumulated and dispose of off-site at permitted landfill

Produced Water Management and Disposal

- Produced water, and hydraulic fracturing fluids will be evaporated on-site; some fluids may be treated and re-used on-site or at other well locations. Concentrated waste fluids will be disposed of off-site at permitted disposal facility

Construction Materials

- Fill material and Aggregate - obtained from local sources
- Top Soil - temporarily stockpiled at perimeter of well pad and along construction corridors for subsequent use during reclamation

Reclamation

- Areas temporarily disturbed during construction, and well drilling, completion and testing will be reclaimed to original conditions, as soon as is practical and in consultation with the surface owner
 - Disturbed areas will be re-contoured to match existing topography
 - Topsoil salvaged during construction activities will be spread to a minimum thickness of 6 inches
 - Reclaimed areas will be planted with seed mixture recommended by local Soil Conservation Service and/or BLM staff, and approved by surface owner
- Areas disturbed during construction and subsequent oil & gas production will be reclaimed to original conditions, as soon after oil & gas production ceases as is practical, and in consultation with the surface owner

Other Information

- Construction and operation of oil & gas well in Guadalupe County, New Mexico does not require a special use permit or waiver from the County Commissioners and/or Planning Department

R
23
E

CUERVO 11.5 MI. +/-

EXISTING 2-TRACK NEEDS
UPGRADED 0.9 MI. +/-

PROPOSED ROAD
RE-ROUTE 0.4 MI. +/-

PROPOSED LOCATION:
LATIGO RANCH #2-34

PROPOSED ACCESS 0.1 MI. +/-

EXISTING 2-TRACK NEEDS
UPGRADED 0.1 MI. +/-

T11N
T10N

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LEGEND:

- EXISTING ROAD
- PROPOSED ACCESS ROAD
- EXISTING 2-TRACK NEEDS UPGRADED



SWEPI

LATIGO RANCH #2-34
SECTION 34, T11N, R23E, N.M.P.M.
35°08'18.16" 104°29'24.20"



Uintah Engineering & Land Surveying
85 South 200 East Vernal, Utah 84078
(435) 789-1017 * FAX (435) 789-1813

TOPOGRAPHIC MAP
SCALE: 1" = 2000' DRAWN BY: Z.L. REVISED: 05-06-08

03 04 08
MONTH DAY YEAR
B
TOPO

District I
1625 N. French Dr., Hobbs, NM 88240
District II
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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 12, 2005
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-019-20136	² Pool Code	³ Pool Name
⁴ Property Code 37165	⁵ Property Name Singleton Properties LLC	⁶ Well Number Latigo 2-34
⁷ OGRID No. 250036	⁸ Operator Name SWEPI LP	⁹ Elevation 4716.2 graded

¹⁰ Surface Location

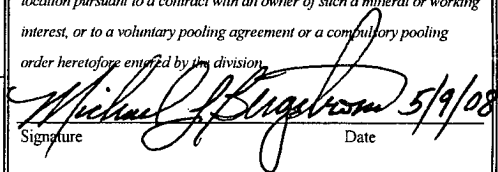
UL or lot no. F	Section 34	Township 10N	Range 23E	Lot Idn	Feet from the 1880+/-	North/South line North	Feet from the 1946+/-	East/West line West	County Guadalupe
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¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
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¹² Dedicated Acres 160.00	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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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.

¹⁶ See Attached Map - Well Location, Latigo Ranch #2-34	CONFIDENTIAL	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 _____ Date 5/9/08 Michael L. Bergstrom Printed Name
		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.
		Date of Survey _____ Signature and Seal of Professional Surveyor: _____ Certificate Number _____

T10N, R23E, N.M.P.M.
(ASSUMED)

SWEPI

Well location, LATIGO RANCH #2-34, Located as shown in T10N, R23E, N.M.P.M., Guadalupe County, New Mexico.

BASIS OF ELEVATION

HILL TRIANGULATION STATION LOCATED IN T10N, R23E, N.M.P.M. TAKEN FROM THE CUERVO QUADRANGLE, NEW MEXICO, GUADALUPE COUNTY, 7.5 MINUTE SERIES (TOPOGRAPHICAL MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 5356 FEET.

DASHED GRID LINES ON THIS PLAT HAVE BEEN PROJECTED FROM SURVEY MONUMENTS FOUND EAST OF PRESTON BECK LAND GRANT LINE. FOOTAGES TO GRID LINES WITHIN LAND GRANT ARE APPROXIMATE.

PRESTON BECK
LAND GRANT LINE

Set Marked Stone,
NW-SE Fenceline
Lat 35.143561
Long 104.473311

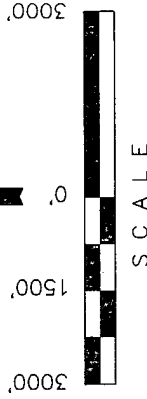
N69°26'06"E
5353.24'

S28°10'33"E - 7653.78' (Meas.)

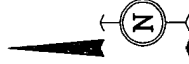
1946'±

LATIGO RANCH #2-34

(Apprx.)
SEC.
34



SCALE



CERTIFICATE

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEY, AND BY ME, I HAVE IN MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

Set Marked Stone,
Steel Post
NW-SE Fenceline
Lat 35.125028
Long 104.461233

CONFIDENTIAL

REVISED: 05-09-08

UNTAH ENGINEERING & LAND SURVEYING

85 SOUTH 200 EAST - VERNAL, UTAH 84078

(435) 789-1017

LEGEND:

— = 90° SYMBOL

● = PROPOSED WELL HEAD.

▲ = SECTION CORNERS LOCATED.

(NAD 83)

LATITUDE = 35°08'18.16" (35.138378)

LONGITUDE = 104°29'24.20" (104.490056)

(NAD 27)

LATITUDE = 35°08'17.96" (35.138322)

LONGITUDE = 104°29'22.26" (104.489517)

SCALE
1" = 3000'

DATE SURVEYED:
03-03-08

DATE DRAWN:
03-12-08

PARTY
B.B. M.A. L.K.

REFERENCES
G.L.O. PLAT

WEATHER
COLD

FILE
SWEPI

District I
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State of New Mexico
Energy Minerals and Natural Resources

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

Form C-144
June 1, 2004

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>SWEPI LP</u> Telephone: <u>(303) 222-6347</u> e-mail address: <u>michael.bergstrom@shell.com</u>		
Address: <u>P.O. Box 567, Houston, TX 77001</u> (Local contact: Shell Exploration & Production Company, 4582 S. Ulster St. Pkwy., Suite 1400, Denver, CO 80237)		
Facility or well name: <u>Latigo 2-34</u> API #: <u>30-019-20136</u> U/L or Qtr/Qtr <u>F</u> Sec <u>34</u> T <u>10N</u> R <u>23E</u>		
County: <u>Guadalupe</u> Latitude <u>35.138378</u> Longitude <u>104.490056</u> NAD: 1927 <input type="checkbox"/> 1983 <input checked="" type="checkbox"/>		
Surface Owner: Federal <input type="checkbox"/> State <input type="checkbox"/> Private <input checked="" type="checkbox"/> Indian <input type="checkbox"/>		
Pit Type: Drilling <input checked="" type="checkbox"/> Production <input type="checkbox"/> Disposal <input type="checkbox"/> Workover <input checked="" type="checkbox"/> Emergency <input type="checkbox"/> Lined <input checked="" type="checkbox"/> Unlined <input type="checkbox"/> Liner type: Synthetic <input checked="" type="checkbox"/> Thickness <u>20</u> mil Clay <input type="checkbox"/> Pit Volume <u>84,430</u> bbl	Below-grade tank 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>	CONFIDENTIAL
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) 100 feet or more (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) No (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) 1000 feet or more (0 points)	
Ranking Score (Total Points)		

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:
See Attached Map - Location Layout for Latigo 2-34, for proposed design and specifications for pits.

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: 5/9/08

Printed Name/Title Michael L. Bergstrom

Signature Michael L. Bergstrom

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 Ed Martin

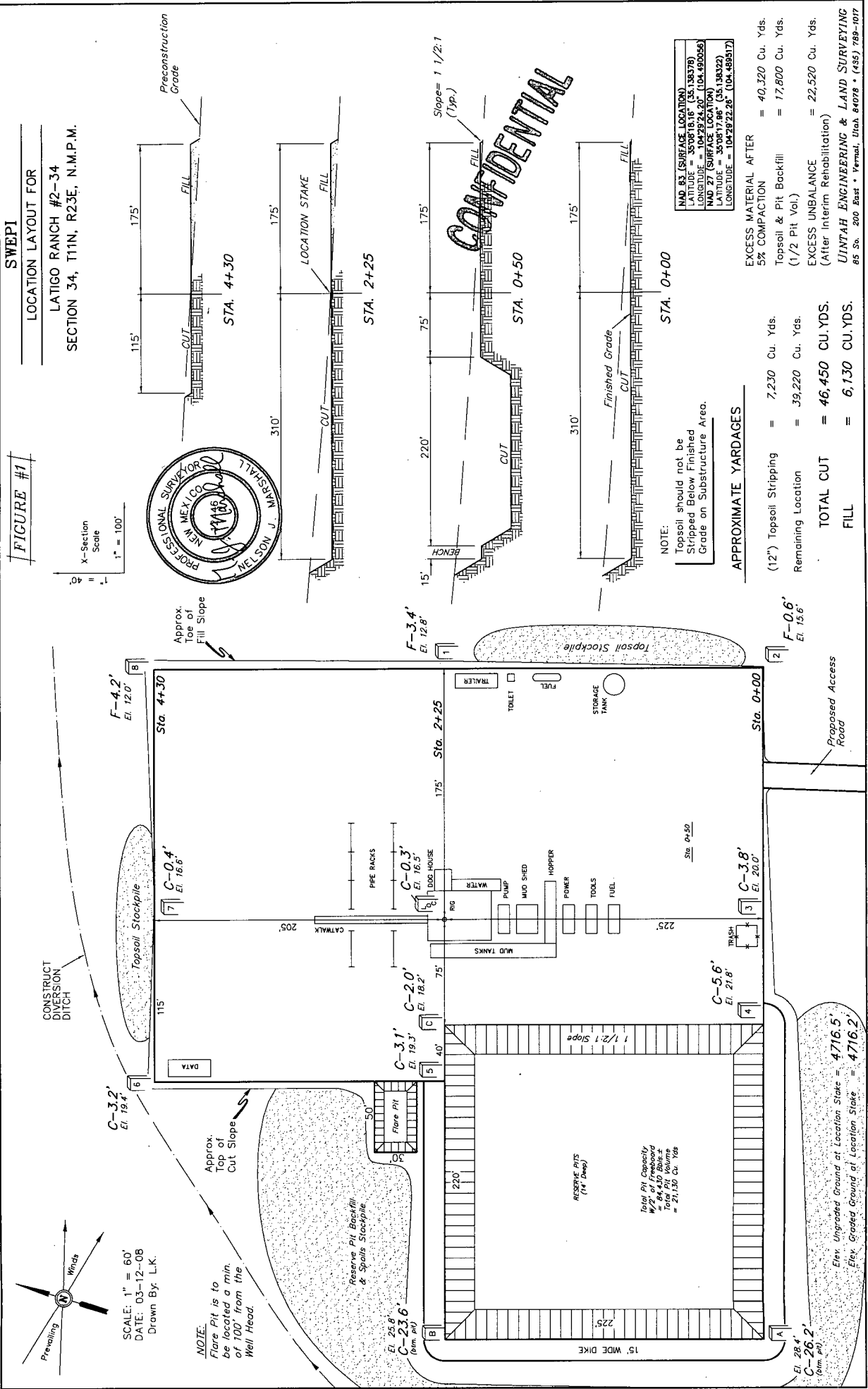
Signature Ed Martin

DISTRICT SUPERVISOR

Date: 5/15/08

FIGURE #1

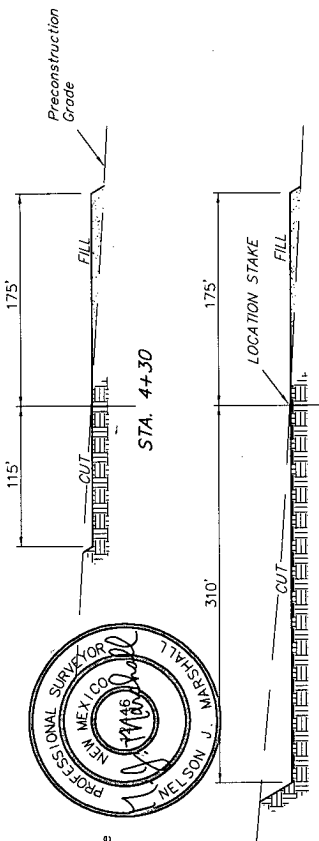
SWEPI
LOCATION LAYOUT FOR
LATIGO RANCH #2-34
SECTION 34, T11N, R23E, N.M.P.M.



X-Section
Scale
1" = 100'



Approx. Top of Fill Slope



F-3.4'
El. 12.8'

Topsoil Stockpile

175'

225'

220'

40'

75'

175'

225'

15' WIDE DIKE

1 1/2:1 Slope

RESERVE PITS (14 Deep)

Total Pit Capacity
= 21,130 Cu. Yds.
Total Pit Volume
= 21,130 Cu. Yds.

Sta. 0+50

Sta. 0+00

Proposed Access Road

Elev. Ungraded Ground at Location Stake = 4716.5'
Elev. Graded Ground at Location Stake = 4716.2'

F-0.6'
El. 13.6'

175'

225'

220'

40'

75'

175'

225'

15' WIDE DIKE

1 1/2:1 Slope

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Total Pit Volume
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NAD 83 (SURFACE LOCATION)
LATITUDE = 35°08'18.16" (35.138378)
LONGITUDE = 104°29'24.20" (104.490056)
NAD 27 (SURFACE LOCATION)
LATITUDE = 35°08'18.16" (35.138378)
LONGITUDE = 104°29'24.20" (104.490056)

NOTE:
Topsoil should not be Stripped Below Finished Grade on Substructure Area.

APPROXIMATE YARDAGES

(12") Topsoil Stripping	=	7,230 Cu. Yds.
Remaining Location	=	39,220 Cu. Yds.
TOTAL CUT	=	46,450 CU.YDS.
FILL	=	6,130 CU.YDS.
EXCESS MATERIAL AFTER 5% COMPACTION	=	40,320 Cu. Yds.
Topsoil & Pit Backfill (1/2 Pit Vol.)	=	17,800 Cu. Yds.
EXCESS UNBALANCE (After Interim Rehabilitation)	=	22,520 Cu. Yds.

UNTAH ENGINEERING & LAND SURVEYING
85 So. 200 East • Vernal, Utah 84078 • (435) 789-1017

SWEPI
LATIGO RANCH #2-34
LOCATED IN GUADALUPE COUNTY, NEW MEXICO
SECTION 34, T11N, R23E, N.M.P.M.

CONFIDENTIAL

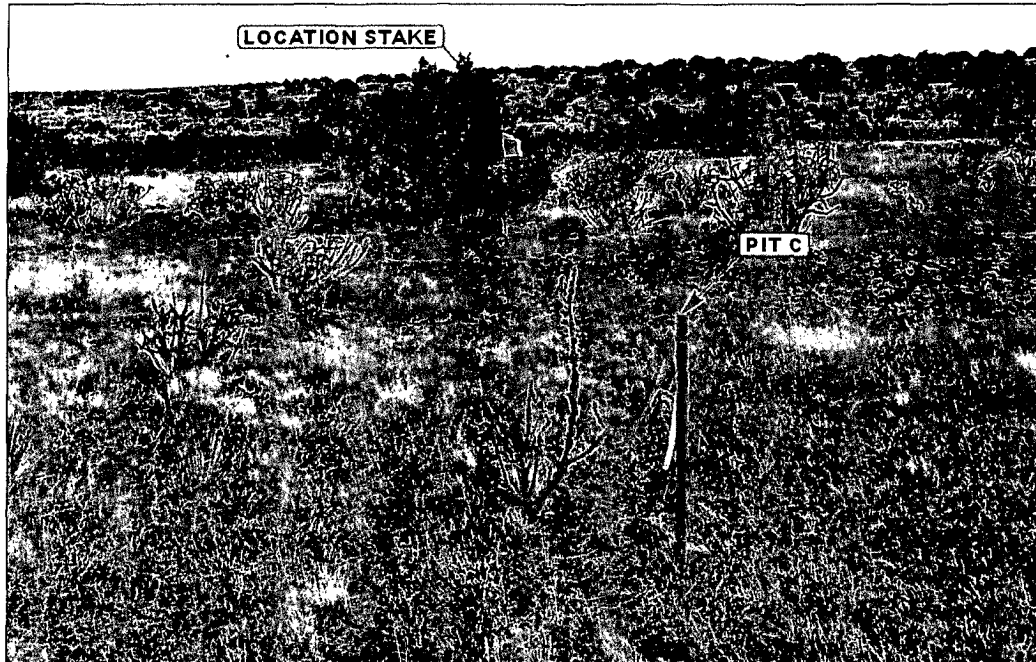


PHOTO: VIEW FROM CORNER #5 TO LOCATION STAKE

CAMERA ANGLE: NORTHEASTERLY

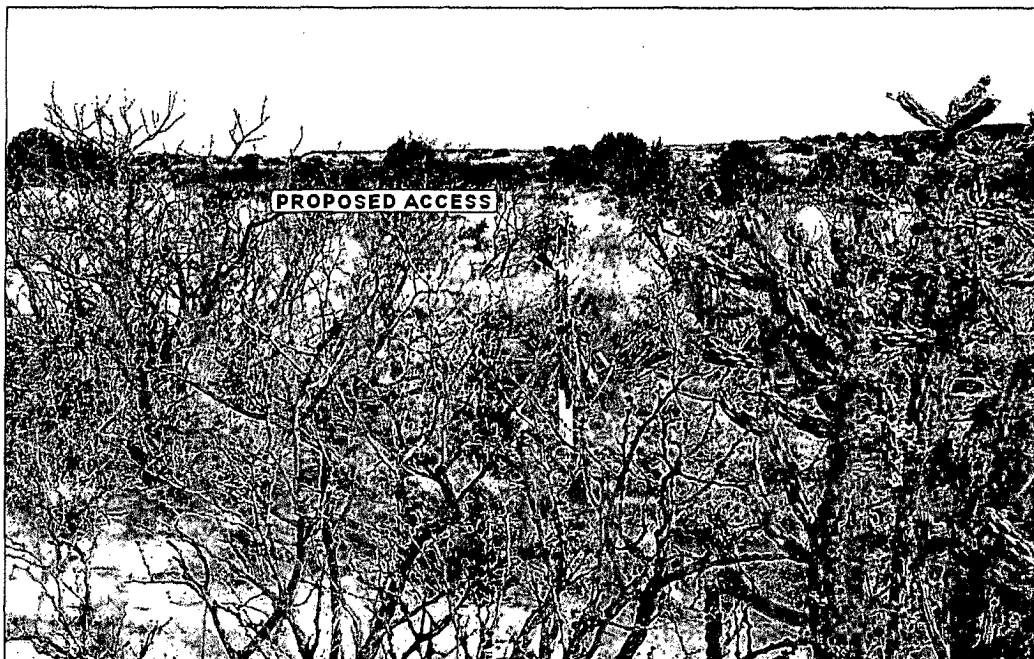


PHOTO: VIEW FROM BEGINNING OF PROPOSED ACCESS

CAMERA ANGLE: NORTHWESTERLY



UELS Uintah Engineering & Land Surveying
85 South 200 East Vernal, Utah 84078
435-789-1017 uels@uelsinc.com

LOCATION PHOTOS

03 04 08
MONTH DAY YEAR

PHOTO

TAKEN BY: BB. DRAWN BY: Z.L. REVISED: 00-00-00



Shell Exploration & Production

State of New Mexico
Energy, Minerals and Natural Resources Dept.
Oil Conservation Division-District 4
1220 South St. Francis Drive
Sante Fe, New Mexico 87505
Attn.: Ed Martin, District Supervisor

RECEIVED
2008 MAY 12 PM 1 44
Shell Exploration & Production Co.
Regulatory Affairs-EP Americas
4582 S. Ulster Way Parkway
Suite 1400
Denver, Colorado 80237

May 9, 2008

CONFIDENTIAL

Subject: Application for Permit to Drill (APD)
Shell Exploration & Production Co., Latigo 2-34
Guadalupe County, New Mexico

Dear Mr. Martin:

Shell Exploration & Production Company, dba SWEPI LP (Shell) requests that New Mexico Oil Conservation Division-District 4 (OCD) review and approve the APD for the subject well. This exploration well is located in area that has no existing oil & n gas production, and is targeting prospective zones that have been the subject of limited exploration. Therefore, Shell requests that OCD hold any information regarding this well confidential during and for one year after drilling and completion. All documents submitted are clearly marked as "confidential".

Shell is currently investigating alternative access routes to this well location, and will amend the APD, if an alternative route is selected for this well. Shell anticipates beginning drilling, completion and testing activities for this well, on or about August 1, 2008.

Shell requests that OCD expedite review of our APD and supporting documentation, such that any possible deficiencies can be identified and properly addressed. If you have any questions or require any additional information regarding this APD, please contact me at (303) 222-6347, or David Janney at Kleinfelder in Albuquerque at (505) 344-7373.

Regards,

Michael L. Bergstrom
Regulatory Coordinator
Shell Exploration & Production Company

Attachments: Form C-101
Drilling & Completion Plan
Surface Use Plan
Form C-144
Location Photos and Maps
Form C-102