

OCD-ARTESIA

Form 3160-3
(December 1990)SUBMIT IN TRIPLICATE*
(Other Instructions on
reverse side)Form approved.
Budget Bureau No. 1004-0136
Expires: December 31, 1991UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a. TYPE OF WORK

DRILL ☒DEEPEN ☐

b. TYPE OF WELL

OIL
WELL ☒Gas
Well ☐

OTHER

SINGLE
ZONE ☐MULTIPLE
ZONE ☐

2. NAME OF OPERATOR

Chevron USA Inc. (Mack Energy Agent)

3. ADDRESS AND TELEPHONE NO.

P.O. Box 960, Artesia, NM 88211-0960

(505) 748-1288

4. LOCATION OF WELL (Report location exactly and in accordance with any state requirements)

At surface

At proposed prod. zone

990 FNL & 2310 FEL

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*

9 miles east of Loco Hills, NM

15. DISTANCE FROM PROPOSED*
LOCATION TO NEAREST
PROPERTY OR LEASE LINE, FT.
(Also to nearest drlg. unit line, if any)

330

18. DISTANCE FROM PROPOSED LOCATION*
TO NEAREST WELL, DRILLING, COMPLETED
OR APPLIED FOR, ON THIS LEASE, FT.

660

16. NO. OF ACRES IN LEASE

640

19. PROPOSED DEPTH

5500

17. NO OF ACRES IN LEASE
TO THIS WELL

40

20. ROTARY OR CABLE TOOLS

Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)

3857' GR

Roswell Controlled Water Basin

22. APPROX. DATE WORK WILL START*

2/18/2006

23.

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17 1/2	H-40, 13 3/8	48	450	WITNESS Circ
12 1/4	J-55, 8 5/8	32	1800	Suff to Circ
7 7/8	J-55, 5 1/2	17	5500	Suff to Circ

Chevron USA Inc. proposes to drill to a depth sufficient to test the Paddock and San Andres formation for oil. If productive, 5 1/2" casing will be cemented. If non-productive, the well will be plugged and abandoned in a manner consistent with federal regulation. Specific programs as per Onshore Oil and Gas Order #1 are outlined in the following attachments:

1. Surveys

Exhibit #1- Well Location Plat

Exhibit #2- Vicinity Map

Exhibit #3- Location Verification Map

2. Drilling Program3. Surface Use & Operating Plan

Exhibit #4- One Mile Radius Map

Exhibit #5- Production Facilities Layout

Exhibit #6- Location Layout

4. Certification5. Hydrogen Sulfide Drilling Operation Plan

Exhibit #7- H2S Warning Sign

Exhibit #8- H2S Safety Equipment

6. Blowout Preventers

Exhibit #9- BOPE Schematic

Exhibit #10- Blowout Preventer Requirements

Exhibit #11- Choke Manifold

7. Responsibility Statement8. Directional Drilling Plan

**APPROVAL SUBJECT TO
GENERAL REQUIREMENTS AND
SPECIAL STIPULATIONS
ATTACHED**

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24.

SIGNED Jerry W. Sherrill TITLE Production Clerk DATE 1/18/2006

Mack Energy Corporation (Agent for Chevron USA Inc.)

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the st

CONDITIONS OF APPROVAL, IF ANY:

If earthen pits are used in association with the drilling of this well, an OCD pit permit must be obtained prior to pit construction. hereon.

APPROVED BY

/s/ Joe G. Lara

TITLE

FIELD MANAGER

DATE

FEB 22 2006

*See Instructions On Reverse Side

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

APPROVAL FOR 1 YEAR

State of New Mexico

Energy, Minerals and Natural Resources Department

DISTRICT I

1626 N. FRENCH DR., BOBBS, 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

OIL CONSERVATION DIVISION

1220 SOUTH ST. FRANCIS DR.
Santa Fe, New Mexico 87505

Form C-102
Revised JUNE 10, 2003
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number	Pool Code 26770	Pool Name Fren Paddock
Property Code 29742	Property Name SKELLY UNIT	Well Number 942
OGRID No. 4323	Operator Name CHEVRON USA INC.	Elevation 3857'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	22	17-S	31-E		1210	NORTH	2195	EAST	EDDY

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	22	17-S	31-E		990	NORTH	2310	EAST	EDDY
Dedicated Acres 40	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

BOTTOM HOLE LOCATION Y=664006.3 N X=646667.7 E GEODETIC COORDINATES NAD 27 NME SURFACE HOLE LOCATION Y=663786.9 N X=646784.2 E LAT.=32°49'26.13" N LONG.=103°51'19.83" W		OPERATOR CERTIFICATION I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief. <i>Jerry W. Sherrell</i> Signature Jerry W. Sherrell Printed Name Production Clerk Title 2/8/2006 Date 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 27, 2005 Date Surveyed Signature & Seal of Professional Surveyor CERTIFICATE NO. 06-13.0130 Certificate No. CARY EIDSON 12641
--	--	---

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

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

Fonn 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: Chevron USA Inc.(Mack Energy Agent) Telephone: (505) 748-1288 e-mail address: jerrys@mackenergycorp.com
Address: P.O. Box 960 Artesia, NM 88211-0960
Facility or well name: Skelly Unit #942 API #- U/L or Qtr/Qtr B See 22 T 17S R 31E
County: Eddy Latitude Longitude NAD: 1927 ☐ 1983 ☐
Surface Owner: Federal ☒ State ☐ Private ☐ Indian ☐

Pit Type: Drilling ☒ Production ☐ Disposal ☐ Workover ☐ Emergency ☐ Lined ☒ Unlined ☐ Liner type: Synthetic ☒ Thickness <u>12</u> mil Clay ☐ Pit Volume <u>3000</u> bbl	Below-grade tank Volume: <u> </u> bbl Type of fluid: <u> </u> Construction material: <u> </u> Double-walled, with leak detection? Yes ☐ 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 50 feet or more, but less than 100 feet 100 feet or more	(20 points) (10 points) (0 points) 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 No	(20 points) (0 points) 0 Points
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	(20 points) (10 points) (0 points) 0 Points
Ranking Score (Total Points)		0 Points

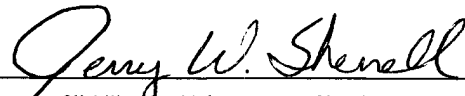
If this is a pit closure: (1) Attach a diagram of the facility showing the pit's relationship to other equipment and tanks. (2) Indicate disposal location: (check the onsite box if you are burying in place) onsite ☐ offsite ☐ If offsite, name of facility (3) Attach a general description of remedial action 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:

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: 2/23/2006

Printed Name/Title Jerry W. Sherrell/Production Clerk

Signature 

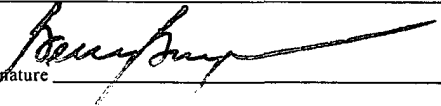
Your certification and NMOCD approval of this application/closure does not relieve the operator of liability should the contents of the pit or tank contaminate ground water or otherwise endanger public health or the environment. Nor does it relieve the operator of its responsibility for compliance with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

Approval:

Gerry Guye

Printed Name/Title

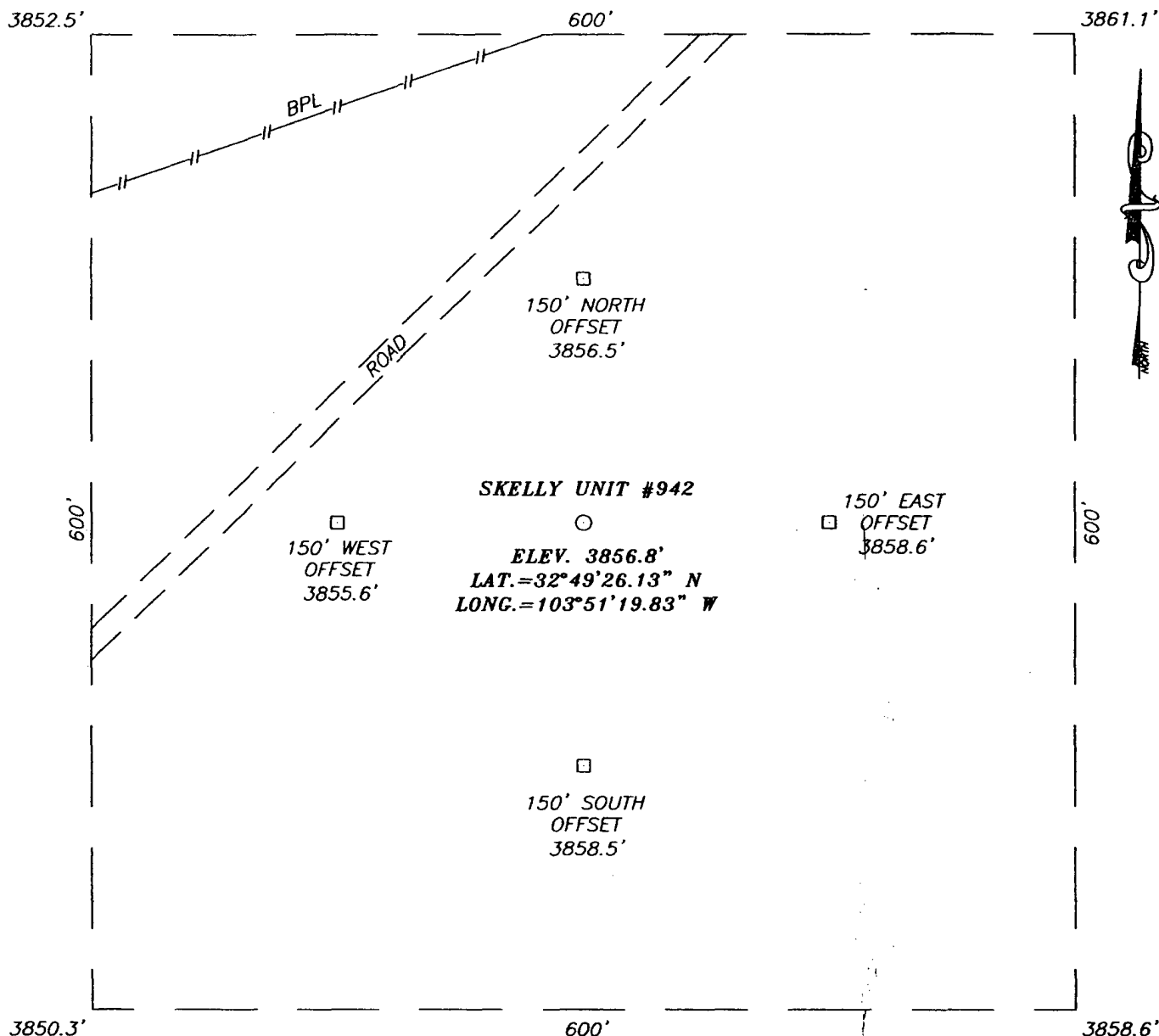
Compliance Officer

Signature 

Date:

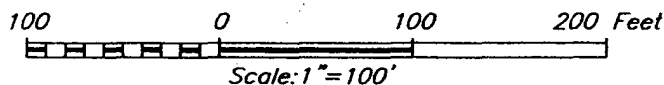
FEB 27 2006

SECTION 22, TOWNSHIP 17 SOUTH, RANGE 31 EAST, N.M.P.M.,
EDDY COUNTY, NEW MEXICO



DIRECTIONS TO LOCATION

FROM THE INTERSECTION OF ST. HWY. 529 AND
 US. HWY. 82, GO EAST ON HWY. 82 FOR APPROX.
 1.5 MILES TO A LEASE RD. GOING NORTH NW.
 FOLLOW LEASE RD. FOR APPROX. 0.3 MILES. THIS
 LOCATION IS WEST APPROX. 160 FEET.



MACK ENERGY COPORATION

SKELLY UNIT #942 WELL
 LOCATED 1210 FEET FROM THE NORTH LINE
 AND 2195 FEET FROM THE EAST LINE OF SECTION 22,
 TOWNSHIP 17 SOUTH, RANGE 31 EAST, N.M.P.M.,
 EDDY COUNTY, NEW MEXICO.

Survey Date: 12/27/05	Sheet 1 of 1 Sheets
W.O. Number: 05.11.2007	Dr By: RZB
Date: 12/30/05	Disk: CD#4
05112007	Scale: 1"=100'



PROVIDING SURVEYING SERVICES
 SINCE 1946
JOHN WEST SURVEYING COMPANY
 412 N. DAL PASO
 HOBBS, N.M. 88240
 (505) 383-3117

Attached to Form 3160-3
Chevron USA Inc. (Mack Energy Agent)
Skelly Unit #942
1210 FNL & 2195 FEL at surface, 990 FNL & 2310 FEL BHL
NW/4 NE/4, Sec 22 T17S R31E
Eddy County, NM

DRILLING PROGRAM

1. Geologic Name of Surface Formation

Quaternary

2. Estimated Tops of Important Geologic Markers:

Quaternary	Surface
Top of Salt	505'
Base of Salt	1025'
Yates	1600'
Queen	2450'
San Andres	3200'
Glorieta	4700'

3. Estimated Depths of Anticipated Fresh Water, Oil and Gas:

Water Sand	150'	Fresh Water
Grayburg	2580'	Oil/Gas
San Andres	3200'	Oil/Gas
Paddock	4800'	Oil/Gas

No other formations are expected to give up oil, gas or fresh water in measurable quantities. Setting 13 3/8" casing to 450' and circulating cement back to surface will protect the surface fresh water sand. Salt Section will be protected by setting 8 5/8" casing to 1800' and circulating cement back to surface. Any shallower zones above TD, which contain commercial quantities of oil and/or gas, will have cement circulated across them by cementing 5 1/2" production casing, which will be run at TD.

4. Casing Program:

Hole Size	Interval	OD Casing	Weight, Grade, Jt, Cond., Type
17 1/2"	0-450'	13 3/8"	48#, H-40, ST&C, New, R-3
12 1/4"	0-1800'	8 5/8"	32#, J-55, ST&C, New, R-3
7 7/8"	0-TD	5 1/2"	17#, J-55, LT&C, New, R-3

Attached to Form 3160-3
Chevron USA Inc. (Mack Energy Agent)
Skelly Unit #942
1210 FNL & 2195 FEL at surface, 990 FNL & 2310 FEL BHL
NW/4 NE/4, Sec 22 T17S R31E
Eddy County, NM

5. Cement Program:

13 3/8" Surface Casing: Circulate to Surface with Class C w/2% CaCl₂.

8 5/8 Intermediate Casing: Circulate to Surface with Class C W/2% CaCl₂.

5 1/2" Production Casing: Cement Casing with Class C w/6# Salt & 2/10 of 1% CFR-3 per sack. We will run a hole caliper and run sufficient cement to circulate to surface.

6. Minimum Specifications for Pressure Control:

The blowout preventer equipment (BOP) shown in Exhibit #9 will consist of a double ram-type (2000 psi WP) preventer. This unit will be hydraulically operated and the ram type preventer will be equipped with blind rams on top of 4 1/2" drill pipe rams on bottom. The BOP will be nipped up on the 13 3/8" surface casing and tested to 1500 psi by a 3rd party. The BOP will then be nipped up on the 8 5/8" intermediate casing and tested by a 3rd party to 2000 psi and used continuously until TD is reached. All BOP's and accessory equipment will be tested to 2000 psi before drilling out of intermediate casing. Pipe rams will be operationally checked each 24-hour period. Blind rams will be operationally checked on each trip out of the hole. These checks will be noted on the daily tour sheets. Other accessories to the BOP equipment (Exhibit #10) will include a Kelly cock and floor safety valve and choke lines and choke manifold (Exhibit #11) with 2000 psi WP rating.

7. Types and Characteristics of the Proposed Mud System:

The well will be drilled to TD with a combination of brine, cut brine and polymer mud system. The applicable depths and properties of this system are as follows:

DEPTH	TYPE	WEIGHT	VISCOSITY	WATERLOSS
0-450'	Fresh Water	8.5	28	N.C.
450-1800'	Brine	10	30	N.C.
1800'-TD	Cut Brine	9.1	29	N.C.

Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept at the well site at all times.

8. Auxiliary Well Control and Monitoring Equipment:

- A. Kelly cock will be kept in the drill string at all times.
- B. A full opening drill pipe-stabbing valve with proper drill pipe connections will be on the rig floor at all times.

Attached to Form 3160-3
Chevron USA Inc. (Mack Energy Agent)
Skelly Unit #942
1210 FNL & 2195 FEL at surface, 990 FNL & 2310 FEL BHL
NW/4 NE/4, Sec 22 T17S R31E
Eddy County, NM

9. Logging, Testing and Coring Program:

- A. The electric logging program will consist of GR-Dual Laterolog, Spectral Density, Dual Spaced Neutron, CSNG Log and will be ran from T.D. to 8 5/8 casing shoe.
- B. Drill Stem test is not anticipated.
- C. No conventional coring is anticipated.
- D. Further testing procedures will be determined after the 5 1/2" production casing has been cemented at TD based on drill shows and log evaluation.

10. Abnormal Conditions, Pressures, Temperatures and Potential Hazards:

No abnormal pressures or temperatures are anticipated. The estimated bottom hole at TD is 110 degrees and estimated maximum bottom hole pressure is 2300 psig. Low levels of Hydrogen sulfide have been monitors in producing wells in the area, so H2S may be present while drilling of the well a plan is attached to the Drilling program. No major loss of circulation zones has been reported in offsetting wells.

11. Anticipated Starting Date and Duration of Operations:

Road and location work will not begin until approval has been received from the BLM. The anticipated spud date is February 18, 2006. Once commenced, the drilling operation should be finished in approximately 10 days. If the well is productive, an additional 30 days will be required for completion and testing before a decision is made to install permanent facilities.

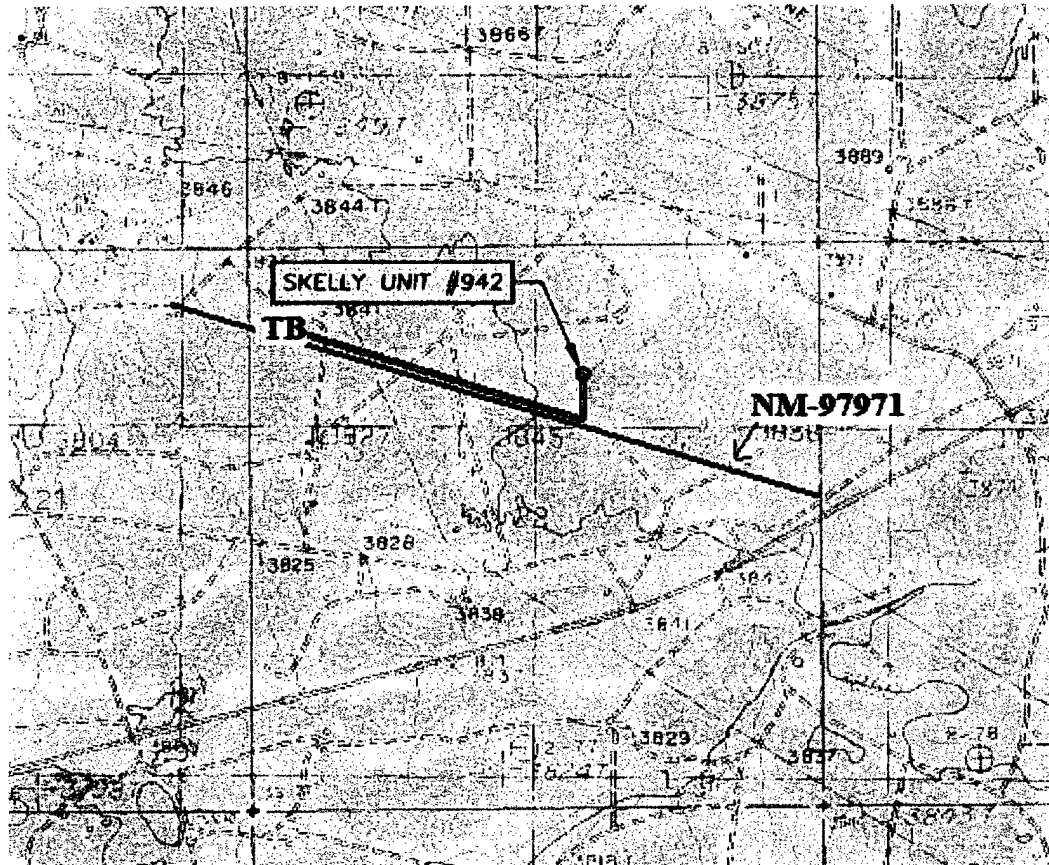
Attached to Form 3160-3
Chevron USA Inc. (Mack Energy Agent)
Skelly Unit #942
1210 FNL & 2195 FEL at surface, 990 FNL & 2310 FEL BHL
NW/4 NE/4, Sec 22 T17S R31E
Eddy County, NM

SURFACE USE AND OPERATING PLAN

1. Existing & Proposed Access Roads

- A. The well site and elevation plat for the proposed well is shown in Exhibit #1. It was staked by John West Engineering, Hobbs NM.
- B. All roads to the location are shown in Exhibit below. The existing roads are illustrated in Blue and are adequate for travel during drilling and production operations. Upgrading existing roads prior to drilling well will be done where necessary.
- C. Directions to Location: From the intersection of Hwy 529 and US Hwy 82 go east 1.5 miles, then northwest .3 miles, location is 160' west.
- D. Routine grading and maintenance of existing roads will be conducted as necessary to maintain their condition as long as any operations continue on this lease.

Exhibit #4



Flowline in Green

2. Proposed Access Road:

Exhibit #3 shows the 0' of new access road. The road will be constructed as follows:

- A. The Maximum width of the running surface will be 14'. The road will be crowned and ditched and constructed of 6" rolled and compacted caliche. Ditches will be at 3:1 slope and 4 feet wide. Water will be diverted where necessary to avoid ponding, prevent erosion, maintain good drainage, and to be consistent with local drainage patterns.
- B. The average grade will be less than 1%.
- C. No turnouts are planned.
- D. No culverts, cattleguard, gates, low water crossings or fence cuts are necessary.
- E. Surfacing material will consist of native caliche. Caliche will be obtained from the nearest BLM approved caliche pit or reserve pit area.
- F. The proposed access road as shown in Exhibit #3 has been centerline flagged by John West Engineering.

3. Location of Existing Wells & Proposed flow lines for New Wells:

Exhibit #4 shows all existing wells within a one-mile radius of this well. As shown on this plat there are numerous wells that are producing from the Grayburg San Andres and Paddock pool. **The flowline will follow an archaeologically approved route to the Skelly Unit Tank Battery located in the NW/4 NW/4 of Sec. 22 T17S R31E.**

4. Location of Existing and/or Proposed Facilities:

- A. Chevron USA Inc. does operate a production facility on this lease.
- B. If the well is productive, contemplated facilities will be as follows:
 - 1) Paddock Completion: Will be stored at the Skelly Unit tank battery. The Facility is shown in Exhibit #5.
 - 2) The tank battery and facilities including all flow lines and piping will be installed according to API specifications.
 - 3) Any additional caliche will be obtained from a BLM approved caliche pit. Any additional construction materials will be purchased from contractors.

Attached to Form 3160-3
Chevron USA Inc. (Mack Energy Agent)
Skelly Unit #942
1210 FNL & 2195 FEL at surface, 990 FNL & 2310 FEL BHL
NW/4 NE/4, Sec 22 T17S R31E
Eddy County, NM

- 4) It will be necessary to run electric power if this well is productive. Power will be run by CVE and they will send in a separate plan for power.

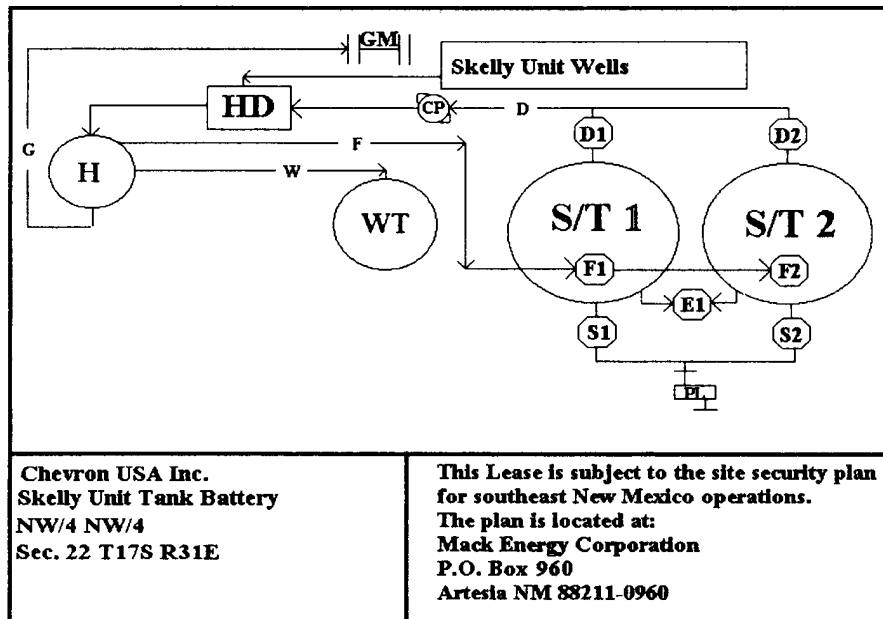


Exhibit #5

A. If the well is productive, rehabilitation plans are as follows:

- 1) The reserve pit will be back filled after the contents of the pit are dry (within 120 days after the well is completed).
- 2) Topsoil removed from the drill site will be used to recontour the pit area to the original natural level, as nearly as possible, and reseeded as per BLM specifications.

5. Location and Type of Water Supply:

The well will be drilled with combination brine and fresh water mud system as outlined in the drilling program. The water will be obtained from commercial water stations in the area and hauled to location by transport truck over the existing and proposed access roads shown in Exhibit #4. If a commercial fresh water source is nearby, fasline may be laid along existing road ROW's and fresh water pumped to the well. No water well will be drilled on the location.

6. Source of Construction Materials:

All caliche required for construction of the drill pad and proposed new access road (approximately 2500 cubic yards) will be obtained from a BLM approved caliche pit or the reserve pit.

7. Methods of Handling Water Disposal:

- A. Drill cuttings not retained for evaluation purposes will be disposed into the reserve pit.
- B. Drilling fluids will be contained in a lined working pit. The reserve pit will contain any excess drilling fluid or flow from the well during drilling, cementing and completion operations. The reserve pit will be an earthen pit, approximately 125' X 125' X 10' deep with a dividing wall dividing it into two horseshoe style pits and fenced on three sides prior to drilling. It will be fenced on the fourth side immediately following rig removal. The reserve pit will be lined 125' X 125' X 10'. The reserve pit will be lined (12-mil thickness) to minimize loss of drilling fluids and saturation of the ground with brine water.
- C. Water produced from the well during completion may be disposed into the reserve pit or a steel tank (depending on the rates). After the well is permanently placed on production, produced water will be collected in tanks (fiberglass) until pumped to an approved disposal system; produced oil will be collected in steel tanks until sold.
- D. Garbage and trash produced during drilling or completion operations will be collected in a trash bin and hauled to an approved landfill. All water and fluids will be disposed of into the reserve pit. Salts and other chemicals produced during drilling or testing will be disposed into the reserve pit. No toxic waste or hazardous chemicals will be produced by this operation.
- E. After the rig is moved out and the well is either completed or abandoned, all waste materials will be cleaned up within 30 days. The reserve pit will be completely fenced and kept closed until it has dried. When the reserve pit is dry enough to breakout and backfill and reseeded as per BLM specifications as weather permits. In the event of a dry hole only a dry hole marker will remain.

8. Ancillary Facilities:

No airstrip, campsite or other facilities will be built as a result of the operation on this well.

Attached to Form 3160-3
Chevron USA Inc. (Mack Energy Agent)
Skelly Unit #942
1210 FNL & 2195 FEL at surface, 990 FNL & 2310 FEL BHL
NW/4 NE/4, Sec 22 T17S R31E
Eddy County, NM

10. Plans for Restoration of the Surface:

- A. Upon completion of the proposed operations, the pit area, after allowing drying, will be broken out and leveled. The original topsoil will be returned to the pit area, which will be leveled and contoured to as nearly the original topography as possible.
- B. The disturbed area will be revegetated by reseeding during the proper growing season with a seed mixture of native grasses as recommended by the BLM.
- C. Three sides of the reserve pit will be fenced prior to and during drilling operations. At the time that the rig is removed, the reserve pit will be fenced on the rig (fourth) side to prevent livestock from being entrapped. The fencing will remain in place until the pit area is cleaned up and leveled. No oil will be left on the surface of the fluid in the pit.
- D. Upon completion of proposed operations, if the well is completed, the reserve pit area will be treated as outlined above within the same prescribed time. Any additional caliche required for facilities will be obtained from a BLM approved caliche pit. Topsoil removed from the drill site will be used to recontour the pit area to its original natural level and reseeded as per BLM specifications.

11. Surface Ownership:

The well site and lease is located entirely on Federal surface. We have notified the surface lessee of the impending operations. According to BLM the lessee is Charles Martin, P.O. Box 706 Artesia, NM 88211.

12. Other Information:

- A. The area around the well site is grassland and the topsoil is sandy. The vegetation is native scrub grass with sagebrush.
- B. There is no permanent or live water in the immediate area.
- C. A Cultural Resources Examination has been requested and will be forwarded to your office in the near future.

13. Lessee's and Operator's Representative:

The Mack Energy Corporation representative responsible for assuring compliance with the surface use plan is as follows:

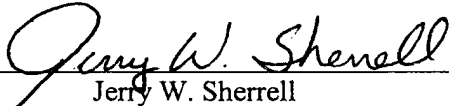
Jerry W. Sherrell
Mack Energy Corporation (Agent for Chevron USA Inc.)
P.O. Box 960
Artesia, NM 88211-0960
Phone (505) 748-1288 (office)

Attached to Form 3160-3
Chevron USA Inc. (Mack Energy Agent)
Skelly Unit #942
1210 FNL & 2195 FEL at surface, 990 FNL & 2310 FEL BHL
NW/4 NE/4, Sec 22 T17S R31E
Eddy County, NM

CERTIFICATION

I hereby certify that I, or person under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which currently exist; that the statements made in this plan are to the best of my knowledge, true and correct; and the work associated with the operations proposed herein will be performed by Mack Energy Corporation and its contractors and subcontractors in conformity with this plan and the terms and conditions which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

Date: 1-18-2006

Signed: 
Jerry W. Sherrell

Mack Energy Corporation (Agent for Chevron USA Inc.)

Chevron USA Inc.

Hydrogen Sulfide Drilling Operation Plan

I. HYDROGEN SULFIDE TRAINING

All personnel, whether regularly assigned, contracted, or employed on an unscheduled basis, will receive training from a qualified instructor in the following areas prior to commencing drilling operations on this well:

1. The hazards and characteristics of hydrogen sulfide (H₂S)
2. The proper use and maintenance of personal protective equipment and life support systems.
3. The proper use of H₂S detectors, alarms, warning systems, briefing areas, evacuation procedures, and prevailing winds.
4. The proper techniques for first aid and rescue procedures.

In addition, supervisory personnel will be trained in the following areas:

1. The effects of H₂S on metal components. If high tensile tubular are to be used, personnel will be trained in their special maintenance requirements.
2. Corrective action and shut-in procedures when drilling or reworking a well, and blowout prevention and well control procedures.
3. The contents and requirements of the H₂S Drilling Operations Plan and Public Protection Plan.

There will be an initial training session just prior to encountering a known or probable H₂S zone (within 3 days or 500 feet) and weekly H₂S and well control drills for all personnel in each crew. The initial training session shall include a review of the site specific H₂S Drilling Operations Plan and the Public Protection Plan. **The concentrations of H₂S of wells in this area from surface to TD are low enough that a contingency plan is not required.**

II. H2S SAFETY EQUIPMENT AND SYSTEMS

Note: All H2S safety equipment and systems will be installed, tested, and operational when drilling reaches a depth of 500 feet above, or three days prior to penetrating the first zone containing or reasonable expected to contain H2S.

1. Well Control Equipment:

- A. Flare line.
- B. Choke manifold.
- C. Blind rams and pipe rams to accommodate all pipe sizes with properly sized closing unit.
- D. Auxiliary equipment may include if applicable: annular preventer & rotating head.

2. Protective equipment for essential personnel:

- A. Mark II Survive air 30-minute units located in the doghouse and at briefing areas, as indicated on well site diagram.

3. H2S detection and monitoring equipment:

- A. 1 portable H2S monitors positioned on location for best coverage and response. These units have warning lights and audible sirens when H2S levels of 20 PPM are reached.

4. Visual warning systems:

- A. Wind direction indicators as shown on well site diagram (Exhibit #8).
- B. Caution/Danger signs (Exhibit #7) shall be posted on roads providing direct access to location. Signs will be painted a high visibility yellow with black lettering of sufficient size to be readable at a reasonable distance from the immediate location. Bilingual signs will be used, when appropriate. See example attached.

5. Mud program:

- A. The mud program has been designed to minimize the volume of H2S circulated to surface. Proper mud weight, safe drilling practices, and the use of H2S scavengers will minimize hazards when penetrating H2S bearing zones.

6. Metallurgy:

- A. All drill strings, casings, tubing, wellhead, blowout preventer, drilling spool, kill lines, choke manifold and lines, and valves shall be suitable for H₂S service.
- B. All elastomers used for packing and seals shall be H₂S trim.

7. Communication:

- A. Radio communications in company vehicles including cellular telephone and 2-way radio.
- B. Land line (telephone) communication at Office.

8. Well testing:

- A. Drill stem testing will be performed with a minimum number of personnel in the immediate vicinity, which are necessary to safely and adequately conduct the test. The drill stem testing will be conducted during daylight hours and formation fluids will not be flowed to the surface. All drill-stem-testing operations conducted in an H₂S environment will use the closed chamber method of testing.
- B. There will be no drill stem testing.

EXHIBIT #7

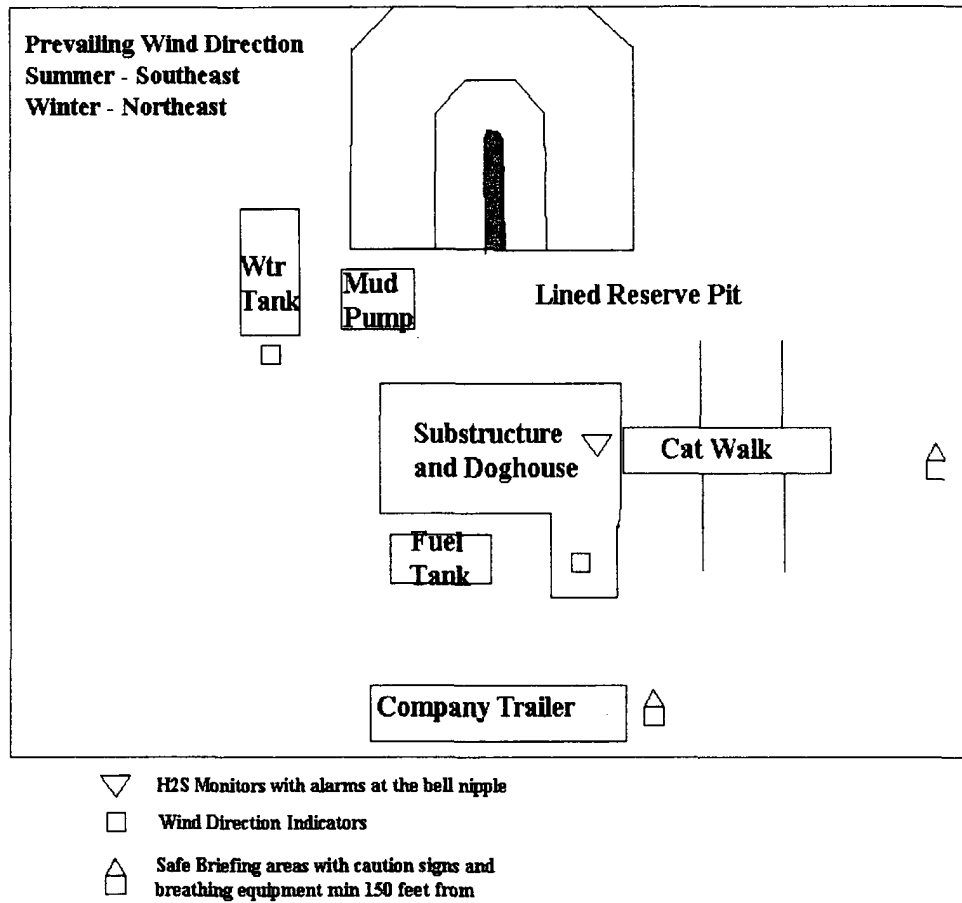
WARNING
YOU ARE ENTERING AN H₂S
AUTHORIZED PERSONNEL ONLY

- 1. BEARDS OR CONTACT LENSES NOT ALLOWED**
- 2. HARD HATS REQUIRED**
- 3. SMOKING IN DESIGNATED AREAS ONLY**
- 4. BE WIND CONSCIOUS AT ALL TIMES**
- 5. CHECK WITH MACK ENERGY FOREMAN AT OFFICE**

MACK ENERGY CORPORATION

1-505-748-1288

DRILLING LOCATION H2S SAFTY EQUIPMENT
Exhibit # 8

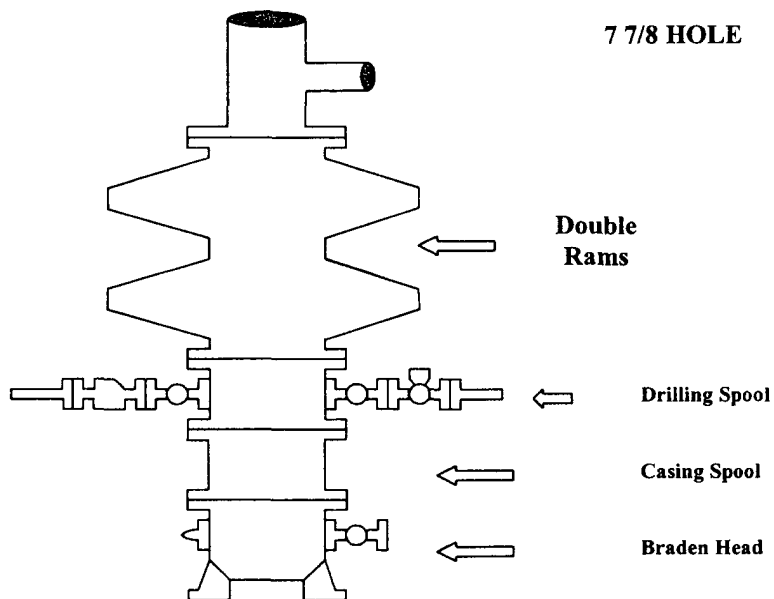


Attachment to Exhibit #9
NOTES REGARDING THE BLOWOUT PREVENTERS
Skelly Unit #942
Eddy County, New Mexico

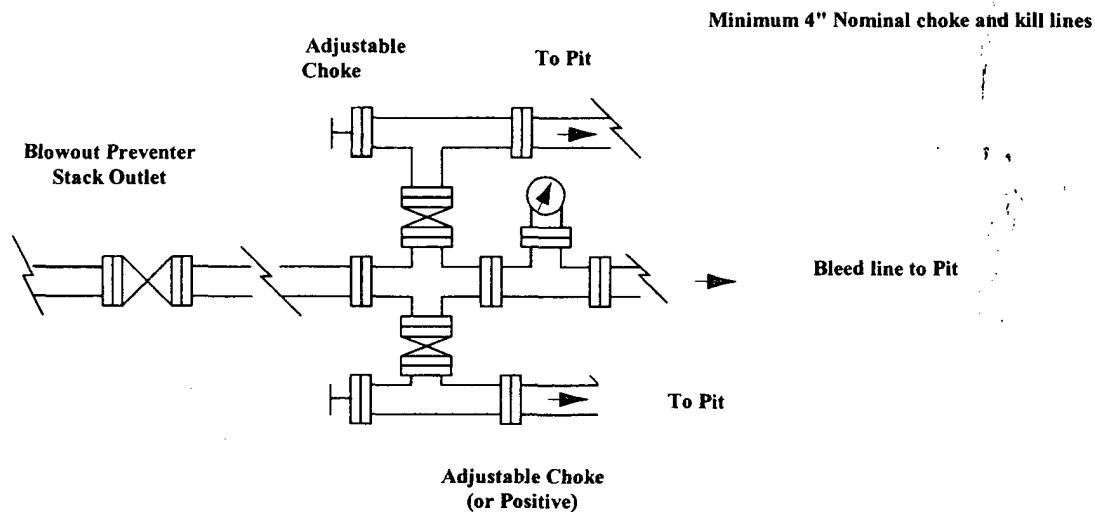
1. Drilling nipple to be so constructed that it can be removed without use of a welder through rotary table opening, with minimum I.D. equal to preventer bore.
2. Wear ring to be properly installed in head.
3. Blow out preventer and all fittings must be in good condition, 2000 psi WP minimum.
4. All fittings to be flanged.
5. Safety valve must be available on rig floor at all times with proper connections, valve to be full 2000 psi WP minimum.
6. All choke and fill lines to be securely anchored especially ends of choke lines.
7. Equipment through which bit must pass shall be at least as large as the diameter of the casing being drilled through.
8. Kelly cock on Kelly.
9. Extension wrenches and hands wheels to be properly installed.
10. Blow out preventer control to be located as close to driller's position as feasible.
11. Blow out preventer closing equipment to include minimum 40-gallon accumulator, two independent sources of pump power on each closing unit installation all API specifications.

Chevron USA Inc.

Exhibit #9 BOPE Schematic



Choke Manifold Requirement (2000 psi WP) No Annular Required



Chevron USA Inc.
Minimum Blowout Preventer Requirements
2000 psi Working Pressure
2 MWP
EXHIBIT #10

Stack Requirements

NO.	Items	Min. I.D.	Min. Nominal
1	Flowline		2"
2	Fill up line		2"
3	Drilling nipple		
4	Annular preventer		
5	Two single or one dual hydraulically operated rams		
6a	Drilling spool with 2" min. kill line and 3" min choke line outlets		2" Choke
6b	2" min. kill line and 3" min. choke line outlets in ram. (Alternate to 6a above)		
7	Valve Gate Plug	3 1/8	
8	Gate valve-power operated	3 1/8	
9	Line to choke manifold		3"
10	Valve Gate Plug	2 1/16	
11	Check valve	2 1/16	
12	Casing head		
13	Valve Gate Plug	1 13/16	
14	Pressure gauge with needle valve		
15	Kill line to rig mud pump manifold		2"

OPTIONAL

16	Flanged Valve	1 13/16	
----	---------------	---------	--

CONTRACTOR'S OPTION TO FURNISH:

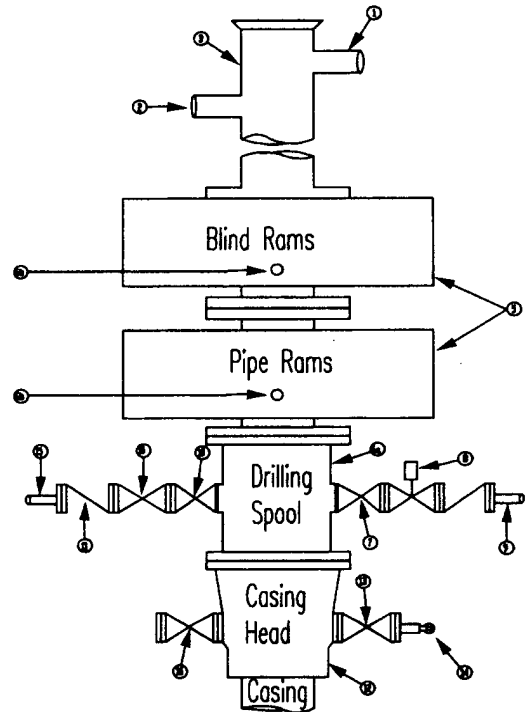
- All equipment and connections above bradenhead or casinghead. Working pressure of preventers to be 2000 psi minimum.
- Automatic accumulator (80 gallon, minimum) capable of closing BOP in 30 seconds or less and, holding them closed against full rated working pressure.
- BOP controls, to be located near drillers' position.
- Kelly equipped with Kelly cock.
- Inside blowout preventer or its equivalent on derrick floor at all times with proper threads to fit pipe being used.
- Kelly saver-sub equipped with rubber casing protector at all times.
- Plug type blowout preventer tester.
- Extra set pipe rams to fit drill pipe in use on location at all times.
- Type RX ring gaskets in place of Type R.

MEC TO FURNISH:

- Bradenhead or casing head and side valves.
- Wear bushing. If required.

GENERAL NOTES:

- Deviations from this drawing may be made only with the express permission of MEC's Drilling Manager.
- All connections, valves, fittings, piping, etc., subject to well or pump pressure must be flanged (suitable clamp connections acceptable) and have minimum working pressure equal to rated working pressure of preventers up through choke valves must be full opening and suitable for high pressure mud service.
- Controls to be of standard design and each marked, showing opening and closing position
- Chokes will be positioned so as not to hamper or delay changing of choke beans. Replaceable parts for adjustable choke, or bean



- sizes, retainers, and choke wrenches to be conveniently located for immediate use.
- All valves to be equipped with hand-wheels or handles ready for immediate use.
- Choke lines must be suitably anchored.
- Handwheels and extensions to be connected and ready for use.
- Valves adjacent to drilling spool to be kept open. Use outside valves except for emergency.
- All seamless steel control piping (2000 psi working pressure) to have flexible joints to avoid stress. Hoses will be permitted.
- Casinghead connections shall not be used except in case of emergency.
- Do not use kill line for routine fill up operations.

Chevron USA Inc.

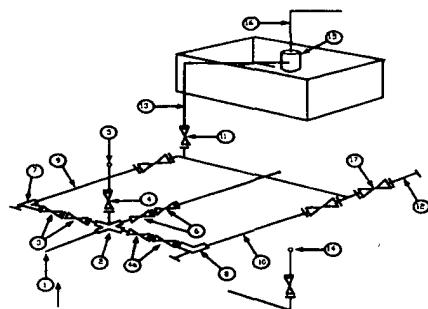
Exhibit #11

MINIMUM CHOKE MANIFOLD

3,000, 5,000, and 10,000 PSI Working Pressure

2 M will be used or greater

3 MWP - 5 MWP - 10 MWP



Mud Pit

Reserve Pit

* Location of separator optional

Below Substructure

Minimum requirements

No.		3,000 MWP			5,000 MWP			10,000 MWP		
		I.D.	NOMINAL	Rating	I.D.	Nominal	Rating	I.D.	Nominal	Rating
1	Line from drilling Spool		3"	3,000		3"	5,000		3"	10,000
2	Cross 3" x 3" x 3" x 2"			3,000			5,000			
2	Cross 3" x 3" x 3" x 2"									10,000
3	Valve Gate Plug	3 1/8		3,000	3 1/8		5,000	3 1/8		10,000
4	Valve Gate Plug	1 13/16		3,000	1 13/16		5,000	1 13/16		10,000
4a	Valves (1)	2 1/16		3,000	2 1/16		5,000	2 1/16		10,000
5	Pressure Gauge			3,000			5,000			10,000
6	Valve Gate Plug	3 1/8		3,000	3 1/8		5,000	3 1/8		10,000
7	Adjustable Choke (3)	2"		3,000	2"		5,000	2"		10,000
8	Adjustable Choke	1"		3,000	1"		5,000	2"		10,000
9	Line		3"	3,000		3"	5,000		3"	10,000
10	Line		2"	3,000		2"	5,000		2"	10,000
11	Valve Gate Plug	3 1/8		3,000	3 1/8		5,000	3 1/8		10,000
12	Line		3"	1,000		3"	1,000		3"	2,000
13	Line		3"	1,000		3"	1,000		3"	2,000
14	Remote reading compound Standpipe pressure gauge			3,000			5,000			10,000
15	Gas Separator		2' x 5'			2' x 5'			2' x 5'	
16	Line		4"	1,000		4"	1,000		4"	2,000
17	Valve Gate Plug	3 1/8		3,000	3 1/8		5,000	3 1/8		10,000

- (1) Only one required in Class 3M
- (2) Gate valves only shall be used for Class 10 M
- (3) Remote operated hydraulic choke required on 5,000 psi and 10,000 psi for drilling.

EQUIPMENT SPECIFICATIONS AND INSTALLATION INSTRUCTION

1. All connections in choke manifold shall be welded, studded, flanged or Cameron clamp of comparable rating.
2. All flanges shall be API 6B or 6BX and ring gaskets shall be API RX or BX. Use only BX for 10 MWP.
3. All lines shall be securely anchored.
4. Chokes shall be equipped with tungsten carbide seats and needles, and replacements shall be available.
5. Choke manifold pressure and standpipe pressure gauges shall be available at the choke manifold to assist in regulating chokes. As an alternate with automatic chokes, a choke manifold pressure gauge shall be located on the rig floor in conjunction with the standpipe pressure gauge.
6. Line from drilling spool to choke manifold should be as straight as possible. Lines downstream from chokes shall make turns by large bends or 90 degree bends using bull plugged tees.



Scientific Drilling
Directional Drilling Operations

Field: Sec. 22, T17S-R31E (Skelly Unit #942)
Site: Eddy County, NM
Well: Skelly Unit #942
Wellpath: OH
Plan: Plan #1

Mack Energy, Corp.

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	1900.00	0.00	0.00	1900.00	0.00	0.00	0.00	0.00	0.00	
3	2169.58	5.39	332.40	2169.19	11.23	-5.87	2.00	0.00	12.67	
4	4541.71	5.39	332.40	4530.81	208.77	-109.13	0.00	0.00	235.57	
5	4811.29	0.00	0.00	4800.00	220.00	-115.00	2.00	180.00	248.24	
6	5511.29	0.00	0.00	5500.00	220.00	-115.00	0.00	0.00	248.24	PBHL

WELL DETAILS

Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
Skelly Unit #942	0.00	0.00	663786.900	646784.200	32°49'26.131N	103°51'19.829W	N/A

TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
PBHL	5500.00	220.00	-115.00	664006.900	646669.200	Point

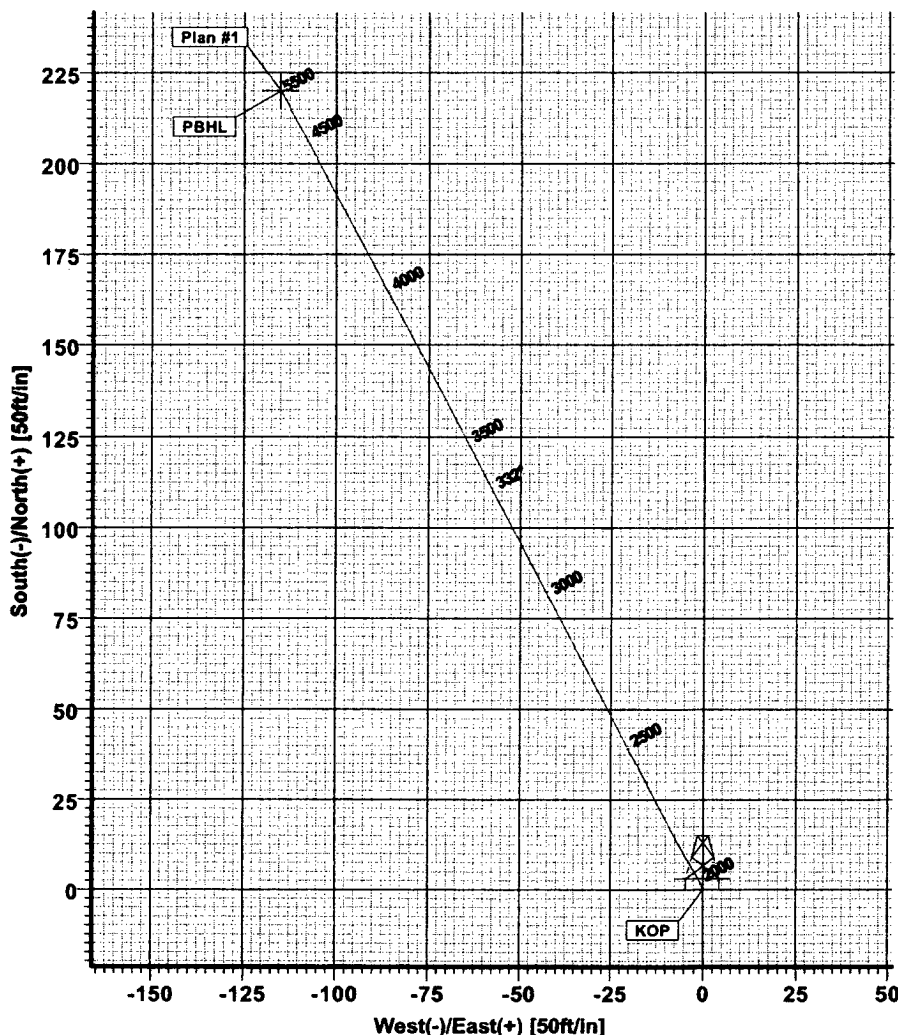
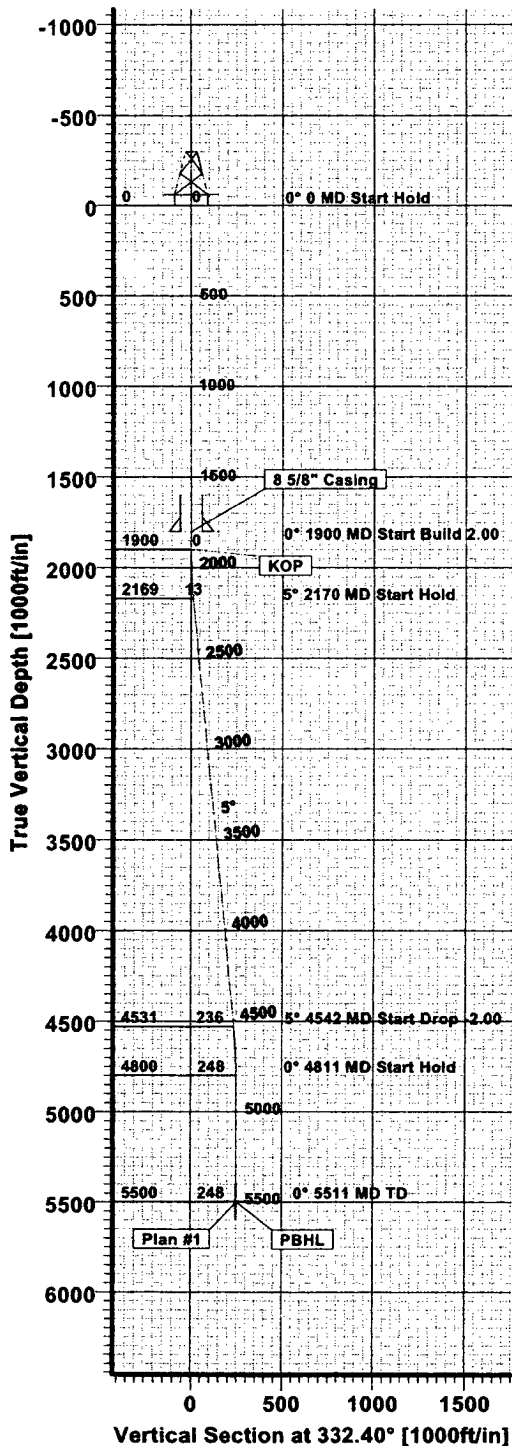
FIELD DETAILS

Sec. 22, T17S-R31E (Skelly Unit #942)
Geodetic System: US State Plane Coordinate System 1927
Ellipsoid: NAD27 (Clarke 1866)
Zone: New Mexico, Eastern Zone
Magnetic Model: Igrf2005
System Datum: Mean Sea Level
Local North: Grid North



Azimuths to Grid North
True North: -0.26°
Magnetic North: 8.14°

Magnetic Field
Strength: 49533nT
Dip Angle: 60.83°
Date: 2006-01-13
Model: Igrf2005



Scientific Drilling Planning Report

Company: Mack Energy Corp.
Field: Sec. 22, T17S-R31E (Skelly Unit #942)
Site: Eddy County, NM
Well: Skelly Unit #942
Wellbath: OH

Date: 2006-01-16 Time: 13:50:14
Co-ordinate(NE) Reference: Well: Skelly Unit #942, Grid North
Vertical (TVD) Reference: KB=3873 3873.0
Section (VS) Reference: Well (0.00N,0.00E,332.40Azi)
Plan: Plan #1

Page: 1

Field: Sec. 22, T17S-R31E (Skelly Unit #942)

Map System: US State Plane Coordinate System 1927
Geo Datum: NAD27 (Clarke 1866)
Sys Datum: Mean Sea Level

Map Zone: New Mexico, Eastern Zone
Coordinate System: Well Centre
Geomagnetic Model: iqrf2005

Site: Eddy County, NM

Sec. 22, T17S-R31E

Site Position:	Northing: 663786.900 ft	Latitude: 32 49 26.131 N
From: Map	Easting: 646784.200 ft	Longitude: 103 51 19.829 W
Position Uncertainty: 0.00 ft		North Reference: Grid
Ground Level: 0.00 ft		Grid Convergence: 0.26 deg

Well: Skelly Unit #942

Slot Name:

Well Position:	+N/-S	0.00 ft	Northing:	663786.900 ft	Latitude:	32	49	26.131 N
	+E/-W	0.00 ft	Easting :	646784.200 ft	Longitude:	103	51	19.829 W
Position Uncertainty:		0.00 ft						

Wellpath: OH

Drilled From:	Surface
Tie-on Depth:	0.00 ft
Above System Datum:	Mean Sea Level
Declination:	8.40 deg
Mag Dip Angle:	60.83 deg
+E/-W	Direction
ft	deg

Current Datum:	KB=3873	Height	3873.00	ft
Magnetic Data:	2006-01-13			
Field Strength:	49533	nT		
Vertical Section:	Depth From (TVD)		+N/-S	
	ft		ft	
	0.00		0.00	

Plan: Plan #1

Date Composed: 2006-01-13
Version: 1
Tied-to: From Surface

Principal: Yes

Plan Section Information

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	TFO deg	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1900.00	0.00	0.00	1900.00	0.00	0.00	0.00	0.00	0.00	0.00	
2169.58	5.39	332.40	2169.19	11.23	-5.87	2.00	2.00	0.00	0.00	
4541.71	5.39	332.40	4530.81	208.77	-109.13	0.00	0.00	0.00	0.00	
4811.29	0.00	0.00	4800.00	220.00	-115.00	2.00	-2.00	0.00	180.00	
5511.29	0.00	0.00	5500.00	220.00	-115.00	0.00	0.00	0.00	0.00	PBHL

Section 1 : Start Hold

[illegible]



Scientific Drilling Planning Report

Company: Mack Energy Corp.
Field: Sec. 22, T17S-R31E (Skelly Unit #942)
Site: Eddy County, NM
Well: Skelly Unit #942
Wellpath: OH

Date: 2006-01-16 Time: 13:50:14 Page: 2
Co-ordinate(NE) Reference: Well: Skelly Unit #942, Grid North
Vertical (TVD) Reference: KB=3873 3873.0
Section (VS) Reference: Well (0.00N,0.00E,332.40Azi)
Plan: Plan #1

Section 1 : Start Hold

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	TFO deg
1800.00	0.00	0.00	1800.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1900.00	0.00	0.00	1900.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Section 2 : Start Build 2.00

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	TFO deg
2000.00	2.00	332.40	1999.98	1.55	-0.81	1.75	2.00	2.00	0.00	0.00
2100.00	4.00	332.40	2099.84	6.18	-3.23	6.98	2.00	2.00	0.00	0.00
2169.58	5.39	332.40	2169.19	11.23	-5.87	12.67	2.00	2.00	0.00	0.00

Section 3 : Start Hold

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	TFO deg
2200.00	5.39	332.40	2199.47	13.77	-7.20	15.53	0.00	0.00	0.00	0.00
2300.00	5.39	332.40	2299.03	22.09	-11.55	24.93	0.00	0.00	0.00	0.00
2400.00	5.39	332.40	2398.58	30.42	-15.90	34.33	0.00	0.00	0.00	0.00
2500.00	5.39	332.40	2498.14	38.75	-20.25	43.72	0.00	0.00	0.00	0.00
2600.00	5.39	332.40	2597.70	47.07	-24.61	53.12	0.00	0.00	0.00	0.00
2700.00	5.39	332.40	2697.26	55.40	-28.96	62.51	0.00	0.00	0.00	0.00
2800.00	5.39	332.40	2796.81	63.73	-33.31	71.91	0.00	0.00	0.00	0.00
2900.00	5.39	332.40	2896.37	72.06	-37.67	81.31	0.00	0.00	0.00	0.00
3000.00	5.39	332.40	2995.93	80.38	-42.02	90.70	0.00	0.00	0.00	0.00
3100.00	5.39	332.40	3095.49	88.71	-46.37	100.10	0.00	0.00	0.00	0.00
3200.00	5.39	332.40	3195.04	97.04	-50.72	109.50	0.00	0.00	0.00	0.00
3300.00	5.39	332.40	3294.60	105.37	-55.08	118.89	0.00	0.00	0.00	0.00
3400.00	5.39	332.40	3394.16	113.69	-59.43	128.29	0.00	0.00	0.00	0.00
3500.00	5.39	332.40	3493.72	122.02	-63.78	137.69	0.00	0.00	0.00	0.00
3600.00	5.39	332.40	3593.27	130.35	-68.14	147.08	0.00	0.00	0.00	0.00
3700.00	5.39	332.40	3692.83	138.68	-72.49	156.48	0.00	0.00	0.00	0.00
3800.00	5.39	332.40	3792.39	147.00	-76.84	165.88	0.00	0.00	0.00	0.00
3900.00	5.39	332.40	3891.95	155.33	-81.20	175.27	0.00	0.00	0.00	0.00
4000.00	5.39	332.40	3991.50	163.66	-85.55	184.67	0.00	0.00	0.00	0.00
4100.00	5.39	332.40	4091.06	171.98	-89.90	194.06	0.00	0.00	0.00	0.00
4200.00	5.39	332.40	4190.62	180.31	-94.25	203.46	0.00	0.00	0.00	0.00
4300.00	5.39	332.40	4290.18	188.64	-98.61	212.86	0.00	0.00	0.00	0.00
4400.00	5.39	332.40	4389.73	196.97	-102.96	222.25	0.00	0.00	0.00	0.00
4500.00	5.39	332.40	4489.29	205.29	-107.31	231.65	0.00	0.00	0.00	0.00
4541.71	5.39	332.40	4530.81	208.77	-109.13	235.57	0.00	0.00	0.00	0.00

Section 4 : Start Drop -2.00

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	TFO deg
4600.00	4.23	332.40	4588.90	213.10	-111.39	240.46	2.00	-2.00	0.00	180.00
4700.00	2.23	332.40	4688.74	218.08	-114.00	246.08	2.00	-2.00	0.00	180.00
4800.00	0.23	332.40	4788.71	219.98	-114.99	248.22	2.00	-2.00	0.00	180.00
4811.29	0.00	0.00	4800.00	220.00	-115.00	248.24	2.00	-2.00	0.00	180.00

Section 5 : Start Hold

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	TFO deg
4900.00	0.00	0.00	4888.71	220.00	-115.00	248.24	0.00	0.00	0.00	0.00
5000.00	0.00	0.00	4988.71	220.00	-115.00	248.24	0.00	0.00	0.00	0.00
5100.00	0.00	0.00	5088.71	220.00	-115.00	248.24	0.00	0.00	0.00	0.00
5200.00	0.00	0.00	5188.71	220.00	-115.00	248.24	0.00	0.00	0.00	0.00
5300.00	0.00	0.00	5288.71	220.00	-115.00	248.24	0.00	0.00	0.00	0.00
5400.00	0.00	0.00	5388.71	220.00	-115.00	248.24	0.00	0.00	0.00	0.00
5500.00	0.00	0.00	5488.71	220.00	-115.00	248.24	0.00	0.00	0.00	0.00
5511.29	0.00	0.00	5500.00	220.00	-115.00	248.24	0.00	0.00	0.00	0.00



Scientific Drilling Planning Report

Company: Mack Energy Corp.
Field: Sec. 22, T17S-R31E (Skelly Unit #942)
Site: Eddy County, NM
Well: Skelly Unit #942
Wellpath: OH

Date: 2006-01-16 Time: 13:50:14 Page: 3
Co-ordinate(NE) Reference: Well: Skelly Unit #942, Grid North
Vertical (TVD) Reference: KB=3873 3873.0
Section (VS) Reference: Well (0.00N,0.00E,332.40Azi)
Plan: Plan #1

Survey

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	Tool/Comment
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00	
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00	
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00	
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00	
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00	
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00	
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00	
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00	
1000.00	0.00	0.00	1000.00	0.00	0.00	0.00	0.00	0.00	0.00	
1100.00	0.00	0.00	1100.00	0.00	0.00	0.00	0.00	0.00	0.00	
1200.00	0.00	0.00	1200.00	0.00	0.00	0.00	0.00	0.00	0.00	
1300.00	0.00	0.00	1300.00	0.00	0.00	0.00	0.00	0.00	0.00	
1400.00	0.00	0.00	1400.00	0.00	0.00	0.00	0.00	0.00	0.00	
1500.00	0.00	0.00	1500.00	0.00	0.00	0.00	0.00	0.00	0.00	
1600.00	0.00	0.00	1600.00	0.00	0.00	0.00	0.00	0.00	0.00	
1700.00	0.00	0.00	1700.00	0.00	0.00	0.00	0.00	0.00	0.00	
1800.00	0.00	0.00	1800.00	0.00	0.00	0.00	0.00	0.00	0.00	8 5/8" Casing
1900.00	0.00	0.00	1900.00	0.00	0.00	0.00	0.00	0.00	0.00	KOP
2000.00	2.00	332.40	1999.98	1.55	-0.81	1.75	2.00	2.00	0.00	
2100.00	4.00	332.40	2099.84	6.18	-3.23	6.98	2.00	2.00	0.00	
2169.58	5.39	332.40	2169.19	11.23	-5.87	12.67	2.00	2.00	0.00	
2200.00	5.39	332.40	2199.47	13.77	-7.20	15.53	0.00	0.00	0.00	
2300.00	5.39	332.40	2299.03	22.09	-11.55	24.93	0.00	0.00	0.00	
2400.00	5.39	332.40	2398.58	30.42	-15.90	34.33	0.00	0.00	0.00	
2500.00	5.39	332.40	2498.14	38.75	-20.25	43.72	0.00	0.00	0.00	
2600.00	5.39	332.40	2597.70	47.07	-24.61	53.12	0.00	0.00	0.00	
2700.00	5.39	332.40	2697.26	55.40	-28.96	62.51	0.00	0.00	0.00	
2800.00	5.39	332.40	2796.81	63.73	-33.31	71.91	0.00	0.00	0.00	
2900.00	5.39	332.40	2896.37	72.06	-37.67	81.31	0.00	0.00	0.00	
3000.00	5.39	332.40	2995.93	80.38	-42.02	90.70	0.00	0.00	0.00	
3100.00	5.39	332.40	3095.49	88.71	-46.37	100.10	0.00	0.00	0.00	
3200.00	5.39	332.40	3195.04	97.04	-50.72	109.50	0.00	0.00	0.00	
3300.00	5.39	332.40	3294.60	105.37	-55.08	118.89	0.00	0.00	0.00	
3400.00	5.39	332.40	3394.16	113.69	-59.43	128.29	0.00	0.00	0.00	
3500.00	5.39	332.40	3493.72	122.02	-63.78	137.69	0.00	0.00	0.00	
3600.00	5.39	332.40	3593.27	130.35	-68.14	147.08	0.00	0.00	0.00	
3700.00	5.39	332.40	3692.83	138.68	-72.49	156.48	0.00	0.00	0.00	
3800.00	5.39	332.40	3792.39	147.00	-76.84	165.88	0.00	0.00	0.00	
3900.00	5.39	332.40	3891.95	155.33	-81.20	175.27	0.00	0.00	0.00	
4000.00	5.39	332.40	3991.50	163.66	-85.55	184.67	0.00	0.00	0.00	
4100.00	5.39	332.40	4091.06	171.98	-89.90	194.06	0.00	0.00	0.00	
4200.00	5.39	332.40	4190.62	180.31	-94.25	203.46	0.00	0.00	0.00	
4300.00	5.39	332.40	4290.18	188.64	-98.61	212.86	0.00	0.00	0.00	
4400.00	5.39	332.40	4389.73	196.97	-102.96	222.25	0.00	0.00	0.00	
4500.00	5.39	332.40	4489.29	205.29	-107.31	231.65	0.00	0.00	0.00	
4541.71	5.39	332.40	4530.81	208.77	-109.13	235.57	0.00	0.00	0.00	
4600.00	4.23	332.40	4588.90	213.10	-111.39	240.46	2.00	-2.00	0.00	
4700.00	2.23	332.40	4688.74	218.08	-114.00	246.08	2.00	-2.00	0.00	
4800.00	0.23	332.40	4788.71	219.98	-114.99	248.22	2.00	-2.00	0.00	
4811.29	0.00	0.00	4800.00	220.00	-115.00	248.24	2.00	-2.00	0.00	
4900.00	0.00	0.00	4888.71	220.00	-115.00	248.24	0.00	0.00	0.00	
5000.00	0.00	0.00	4988.71	220.00	-115.00	248.24	0.00	0.00	0.00	



Scientific Drilling Planning Report

Company: Mack Energy Corp.
Field: Sec. 22, T17S-R31E (Skelly Unit #942)
Site: Eddy County, NM
Well: Skelly Unit #942
Wellpath: OH

Date: 2006-01-16 Time: 13:50:14 Page: 4
Co-ordinate(NE) Reference: Well: Skelly Unit #942, Grid North
Vertical (TVD) Reference: KB=3873 3873.0
Section (VS) Reference: Well (0.00N,0.00E,332.40Azi)
Plan: Plan #1

Survey

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	Tool/Comment
5100.00	0.00	0.00	5088.71	220.00	-115.00	248.24	0.00	0.00	0.00	
5200.00	0.00	0.00	5188.71	220.00	-115.00	248.24	0.00	0.00	0.00	
5300.00	0.00	0.00	5288.71	220.00	-115.00	248.24	0.00	0.00	0.00	
5400.00	0.00	0.00	5388.71	220.00	-115.00	248.24	0.00	0.00	0.00	
5500.00	0.00	0.00	5488.71	220.00	-115.00	248.24	0.00	0.00	0.00	
5511.29	0.00	0.00	5500.00	220.00	-115.00	248.24	0.00	0.00	0.00	PBHL

Targets

Name	Description Dip.	Dir.	TVD ft	+N/-S ft	+E/-W ft	Map Northing ft	Map Easting ft	← Latitude → Deg Min Sec	← Longitude → Deg Min Sec
PBHL			5500.00	220.00	-115.00	664006.900	646669.200	32 49 28.313 N	103 51 21.165 W
-Plan hit target									

Casing Points

MD ft	TVD ft	Diameter in	Hole Size in	Name
1800.00	1800.00	8.625	8.625	8 5/8" Casing

Annotation

MD ft	TVD ft	
1900.00	1900.00	KOP

CONDITIONS OF APPROVAL - DRILLING

Operator's Name: Chevron USA, Inc. (Mack Energy, Agent)
Well Name & No. Skelly Unit #942
Surface Location: 1210' FNL, 2195' FEL, Section 22, T. 17 S., R. 31 E., Eddy County, New Mexico
Bottom Location: 990' FNL, 2310' FEL, Section 22, T. 17 S., R. 31 E., Eddy County, New Mexico
Lease: LC-029419-A

I. DRILLING OPERATIONS REQUIREMENTS:

1. The Bureau of Land Management (BLM) is to be notified at the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (505) 361-2822 for wells in Eddy County in sufficient time for a representative to witness:

A. Well spud

B. Cementing casing: 13-3/8 inch 8-5/8 inch 5-1/2 inch

C. BOP tests

2. A Hydrogen Sulfide (H₂S) Drilling Operation Contingency Plan shall be activated prior to drilling into the Queen formation. A copy of the plan shall be posted at the drilling site.

3. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.

4. Submit a Sundry Notice (Form 3160-5, one original and five copies) for each casing string, describing the casing and cementing operations. Include pertinent information such as; spud date, hole size, casing (size, weight, grade and thread type), cement (type, quantity and top), water zones and problems or hazards encountered. The Sundry shall be submitted within 15 days of completion of each casing string. The reports may be combined into the same Sundry if they fall within the same 15-day time frame.

5. The API No. assigned to the well by NMOCD shall be included on the subsequent report of setting the first casing string.

II. CASING:

1. The 13-3/8 inch surface casing shall be set at approximately 450 feet or 25 feet into the top of the Rustler Anhydrite and cement circulated to the surface. If cement does not circulate to the surface the appropriate BLM office shall be notified and a temperature survey or cement bond log shall be run to verify the top of the cement. Remedial cementing shall be completed prior to drilling out that string.

2. The minimum required fill of cement behind the 8-5/8 inch intermediate casing is to be circulated to the surface.

3. The minimum required fill of cement behind the 5-1/2 inch production casing is to reach at least 500 feet above the top of the uppermost hydrocarbon productive interval.

III. PRESSURE CONTROL:

1. All BOP systems and related equipment shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2. The BOP and related equipment shall be installed and operational before drilling below the 13-3/8 inch casing shoe and shall be tested as described in Onshore Order No. 2. Any equipment failing to test satisfactorily shall be repaired or replaced.

2. Minimum working pressure of the blowout preventer and related equipment (BOPE) shall be 2000 psi.

3. The appropriate BLM office shall be notified in sufficient time for a representative to witness the tests.

- The tests shall be done by an independent service company.
- The results of the test shall be reported to the appropriate BLM office.
- Testing fluid must be water or an appropriate clear liquid suitable for sub-freezing temperatures. Use of drilling mud for testing is not permitted since it can mask small leaks.
- Testing must be done in a safe workman-like manner. Hard line connections shall be required.

1/31/2006

acs