N.M. Oil Cons. DIV-Dist. 2
1301 W. Grand Avenue
Artesia, NM 88210

Form 3160-3
(April 2004)

FORM APPROVED
OMB No. 1004-0137
Expires March 31, 2007

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No. ~~0542015~~ NM 32636
6. If Indian, Allotee or Tribe Name
7. If Unit or CA Agreement, Name and No.
8. Lease Name and Well No. **Teledyne 12 Federal #2**
9. API Well No. **30-015-33928**
10. Field and Pool, or Exploratory **East Loving Delaware**
11. Sec., T. R. M. or Blk. and Survey or Area **Sec., T23S, R28E N.M.P.M.**
12. County or Parish **Eddy**
13. State **NM**

1a. Type of work: ☑ DRILL ☐ REENTER

1b. Type of Well: ☑ Oil Well ☐ Gas Well ☐ Other ☐ Single Zone ☐ Multiple Zone

2. Name of Operator **RB Operating Company**

3a. Address **777 Main Street Suite 800 Fort Worth TX 76102**

3b. Phone No. *(include area code)* **(817) 810-1908**

4. Location of Well *(Report location clearly and in accordance with any State requirements.*)*
At surface **1980' FSL & 990' FWL**
At proposed prod. zone **1980' FSL & 990' FWL**

RECEIVED
FEB 03 2005
OCD-ARTESIA

14. Distance in miles and direction from nearest town or post office* **3.7 Miles Northeast From Loving, NM**

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)	16. No. of acres in lease	17. Spacing Unit dedicated to this well
	640	**40**

18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed Depth	20. BLM/BIA Bond No. on file
	6500	

21. Elevations (Show whether DF, KDB, RT, GL, etc.)	22. Approximate date work will start*	23. Estimated duration
3004'	**05/15/2005**	**15 Days**

24. Attachments — CARLSBAD CONTROLLED WATER BASIN

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, shall be attached to this form:

1. Well plat certified by a registered surveyor.
2. A Drilling Plan.
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification
6. Such other site specific information and/or plans as may be required by the authorized officer.

25. Signature	Name *(Printed/Typed)*	Date
Linda C. Stiles	**Linda C. Stiles**	**11/05/2004**

Title: **Sr. Engineering Tech**

Approved by *(Signature)*	Name *(Printed/Typed)*	Date
/s/ Jim Stovall	Jim Stovall	FEB - 2 2005

Title: FOR FIELD MANAGER — Office: CARLSBAD FIELD OFFICE

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.
Conditions of approval, if any, are attached. APPROVAL FOR 1 YEAR

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make 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.

*(Instructions on page 2)

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS
AND SPECIAL STIPULATIONS
ATTACHED

State of New Mexico

Energy, Minerals and Natural Resources Department

...RENCH DR., HOBBS, NM 88240

DISTRICT II
1301 W. GRAND AVENUE, ARTESIA, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

DISTRICT IV
1220 S. ST. FRANCIS DR., SANTA FE, NM 87505

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	Pool Name

Property Code	Property Name	Well Number
	TELEDYNE 12 FEDERAL	2

OGRID No.	Operator Name	Elevation
	R.B. OPERATING	3004'

Surface Location

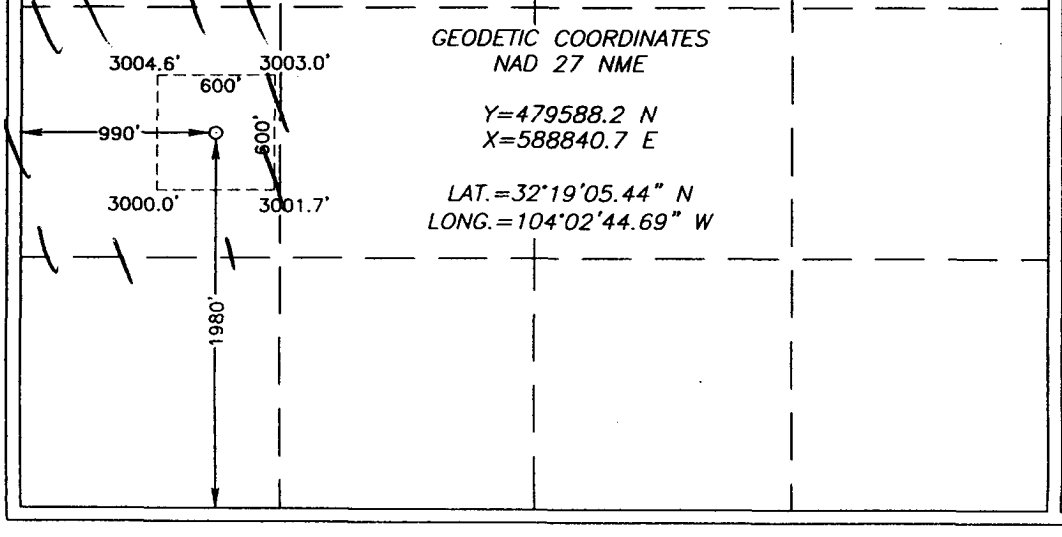
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
L	12	23-S	28-E		1980	SOUTH	990	WEST	EDDY

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

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
40			

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



GEODETIC COORDINATES
NAD 27 NME

Y=479588.2 N
X=588840.7 E

LAT.=32°19'05.44" N
LONG.=104°02'44.69" W

OPERATOR CERTIFICATION

I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.

D K Robinson
Signature

D K Robinson
Printed Name

Drlg Mgr
Title

11/30/04
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 supervison, and that the same is true and correct to the best of my belief.

OCTOBER 13, 2004
Date Surveyed LA

Signature & Seal of Professional Surveyor

RONALD J. EIDSON
NEW MEXICO
REGISTERED PROFESSIONAL SURVEYOR

Ronald J. Eidson 10/29/04
04.11.1330

Certificate No. RONALD J. EIDSON 3239
GARY EIDSON 12641

RB OPERATING COMPANY

Drilling Program

Prepared 12/3/2004

PROPOSED DEPTH: 6400' MD
6400' TVD

COUNTY: Eddy, NM

ANTICIPATED PRODUCTIVE FORMATION: Brushy Canyon

NMOCD PERMIT #: xxxxxx **API NO:** 30-015-xxxxx

GENERAL:
This will be a 6400' Brushy Canyon producer in Eddy Co., New Mexico drilled on a daywork basis by Patterson Rig #65. After building the surface location Rig #65 will move in and drill a 12-1/4" surface hole to +/-570. Actual TD will be spaced so that casing will be landed where the casing head can be screwed on. A string of 8-5/8" casing will be run and cemented to surface.

Nipple up BOPs and test same, drilling will continue with a 7-7/8" hole to a total depth of 6400'. Actual TD will be spaced so that casing will be landed where the casing head can be screwed on. After electric-logging the open-hole interval, a string of 5-1/2" casing will be run and cemented from total depth to surface and the tubing head installed.

Well will be drilled on a daywork contract.

ESTIMATED FORMATION TOPS: (Log Depths)

Anticipated tops are approximate:

Pardue	4670'
BC 'A'	5905'
BC 'B'	5990'
BC 'C'	6105'
BC 'D'	6170'
Total Depth	6400'

DETAILED DRILLING PROCEDURE

TIMES AND EVENTS TO NOTE ON DRILLING REPORT:

A. SPUD
B. TD
C. RIG RELEASE

MUD PROGRAM

INTERVAL	MUD WEIGHT	FUNNEL VIS.	PV/YP	API Fluid Loss
0' - 570'	8.4 – 9.0	36-45		NC
570'-6000'	9.9 – 10.1	28-32		NC
6000'-6400'	9.9 - 10.2	34-38		Less than 20

1) Level and build an all-weather location and access road.

2) MIRU Patterson Rig #65. Perform rig safety inspection and ensure that everything is in proper working order prior to spudding well. In some areas it may be necessary to set a conductor due to sand. The well will be drilled with a closed loop mud system. RU rails and cuttings catch tanks and additional mud cleaning equipment.

3) Notify NMOCD of intent to spud, run casing and cement each 24 hours in advance 505-748-1283.

4) Spud well with 12.25" mill tooth bit. BHA should consist of 4-8" drill collars and 6" drill collars. Drill to +/- 570' (Actual depth will be determined by the length of the casing). Circulate hole clean. Sweep and condition hole to run casing. Drop a TOTCO prior to POOH (must run 1st survey prior to 500' per NMOCD rules). Pull out of hole, lay down 12.25" BHA.

NOTE: Mud through this interval will be a native spud mud supplemented with Bentonite. Lime may be used to flocculate the mud and increase the yield point to clean the hole. Mix paper for seepage control. Utilize all solids control equipment to control drill solids. Run as fine of mesh shaker screens as possible. Use water to control mud weight and viscosity. Maintain mud weight at 8.4 – 9.0 ppg.

5) Make sure to get mill test papers with surface casing. Rig up casing crew and run 8-5/8", 24.0#, J-55, ST&C as follows:

1-8-5/8" Texas Pattern Shoe
1-8-5/8" Insert Float Collar
1-8-5/8" x 12-1/4" Centralizer 10' above shoe
1-8-5/8" x 12-1/4" Centralizer next two joints
1-8-5/8" Stop Ring

6) Circulate for at least bottoms up plus one casing volume with mud prior to cementing. Cement surface casing according to cement recommendation. NOTE: Have field bin, cement, and circulating equipment on location prior to casing job. DO NOT call for pump truck until needed. Attempt to cut down on hours over minimum.

a) Review rates, pressures, displacement volumes and casing pressure rating with Service Company and rig personnel. All cement slurries are to be lab tested; both a pilot test and a test of the actual field blend. Report results, including 24 hour compressive strengths, to the office. **(See Cement Testing Requirements below).** Also keep two samples of each dry cement.

WITNESS b) Cement well as follows: Pump 10 bbl fresh water , mix 350 sxs class "C" with 2% CcCl2, ¼# celloseal mixed @ 14.8ppg & 1.32 ft3/ sx Tail, Displace with fresh water, Bump plug with w/ 500 psi over final pump pressure.

c) If cement is not circulated to surface, contact the office and the NMOCDC and prepare to run 1" and top out cement. Have 1" pipe on location for top-out.

d) If cement falls, fill 12.25" X 8-5/8" annulus with cement.

7) Release pressure and check for flow back. If float is holding WOC six (6) hours before NU wellhead and BOP. Otherwise shut in well, hold & WOC 12 hours. Well must stand at least 8 hours total before any testing of casing is performed per NMOCD.

8) After Cementing casing, screw on 8-5/8" Larkin Model 92 style casing head. Test BOP blind Rams & choke manifold 250#

high. Pick up bit (Reed TD53B, jetted w/ 3-12's) & BHA , trip in hole, test BOP pipe rams 250# low & 3000#. sure test casing to 1000 psi for 30 minutes prior to drilling out shoe.

MUD NOTES: See Mud Program for details

After cementing 8-5/8" casing circ pit with brine water. Mix paper for seepage control. Utilize pre-hydrated Gel/Lime sweeps for flushing the hole. Run all available solids control equipment to control weight. Add brine water as needed to maintain volume. Add LCM to system only as needed. Use batch LCM treatment if losses occur and maintain as needed.

9) Drill ahead with brine water in 7-7/8" hole taking deviation surveys every ±500' or nearest bit run per NMOCD rules. Use sweeps as needed to clean hole. Drill to +/-6400; exact TD will be determined by the length of the casing. Sweep and condition hole in preparation for logging. Spot a 50 bbl, 40-42 visc pill prior to POOH for logs. Strap out of hole.

10) RU Wire line Truck and Tools. Log well as instructed by RB Operating. Rotary sidewall cores may be required along with RFTs.

11) Make a conditioning trip prior to running casing. Trip into hole with BHA and drill pipe, break circulation at 2400'. Ream last two stands to bottom. Circulate and condition hole. Maintain viscosity of 38. TOH laying down 4-1/2" drill pipe and drill collars. Clear floor and prepare to run casing.

12) Rig up casing crew and run 5-1/2" 15.5#, J-55, LT&C as follows:
   a) Float shoe (thread-lock)
   b) 2 jts. 5-1/2", 15.5#, J-55, LT&C casing (thread-lock)
   c) Float collar (thread-lock)
   d) 5-1/2", 15.5#, J-55, LT&C Casing to 3350'.
   e) DV tool.
   f) 5-1/2", 15.5#, J-55, LT&C Casing to surface.

   The two bottom joints of 5-1/2" casing and the float shoe and float collar should be thread-locked (do not weld pipe). Run 1 centralizer 5' above shoe with limit clamp, one on the next collar, one just below the float collar with limit clamp and one per joint up to 4500'. Run 1 centralizer above and below the DV tool.

13) Circulate mud for at least bottoms up plus one casing volume prior to cementing.

14) Cement the production casing as follows. Re-figure cement volumes on a basis of: caliper + 20% + 50 sx. Precede Cement with 20 bbl fresh water, 500 gals superflush, 20 bbl fresh water

Stage One:

Lead: 600 sx 50:50 Poz C + 2% Gel + 0.40% TF-4 + 57% water + 0.3% CF-2 + 10 pps Gilsonite, mixed at 13.6 ppg, 1.48 ft3/sk.

Tail: 150 sx. Class "C" + 0.2% TF-4 + .3% CF-14 + 56% water, mixed at 14.8 ppg, 1.33 ft3/sk.

Release pressure and check for flow back. After bumping plug, drop DV tool opening dart and allow to fall. Open DV tool and circulate 4 to 6 hours. Mix and pump stage two.

Stage Two:

Lead: 820 sx 35:65 Poz C + 10% D44 + 6% D20 + 0.2% D46, mixed at 12.7 ppg, 2.08 ft3/sk.

100 sx Class C + 2% CaCl2, mixed at 14.8 ppg, 1.34 ft3/sk.

a) Review rates, pressures, displacement volumes and casing pressure rating with Service Company and rig personnel. All cement slurries are to be lab tested; both a pilot test and a test of the actual field blend. Report results, including 24 hour compressive strengths, to the office. **(See Cement Testing Requirements below).** Also keep two samples of each dry cement.

b) Have additional water storage on location as necessary for mixing cement. Have water analyzed by cementing company for compatibility with cement and chemicals.

c) Reciprocate pipe during job. Pump spacer and cement at 7-8 BPM. When the last cement has been pumped, maintain rate at 7-8 BPM. Displace with fresh water. When reaching displacement to shoe joint minus 10 bbls slow pump rate to 2 barrels per minute or less prior to bumping plug.

d) Bump plug with 500 psi over final displacement pressure and hold pressure for 15 minutes.

e) If cement does not circulate notify NMOCD office.

15) Release pressure and check for flow back. If floats are holding, continue to make preparations to hang 5-1/2" casing one foot off bottom. If floats do not hold, wait 12 hours on cement.

16) Set 5-1/2" slips in "A" section. Nipple down BOP, Nipple up well head.

17) Install cap. Clean mud pits and release rig.

CEMENT TESTING REQUIREMENTS:

Laboratory Blend: Obtain thickening time, rheology, water loss, and compressive strengths of the laboratory cement blend with a water sample of the actual water to be used in cementing for each cement slurry to be pumped.

Field Blend: Obtain thickening time of the field cement blend with a water sample of the actual water to be used in cementing for each slurry to be pumped. If the thickening time of the field blend is consistent with the thickening time of the laboratory blend, proceed with the cement job. If not, wait on the compressive strength results. Regardless of thickening time results, obtain all of the compressive strengths of field blend to compare with the compressive strengths of the laboratory blend.

NAME	POSITION	CELL PHONE	HOME PHONE	OFFICE PHONE
George Allen Teer	VP of Operations	(817) 723-1107	(817) 491-3740	(817) 870-2601
Don Robinson	Drilling Manager	(469) 450-2281	(972)-317-8345	(817) 509-1506
Andrew Tullis	District Engineer	(817) 797-2804	(214) 505-0233	(817) 509-1505
Martin Emery	Chief Geologist	(817) 366-3693	(817) 430-4861	(817)870-2601
Linda Stiles	Engineering Tech / Environmental Matters	(817) 291-4618	(817) 561-5544	(817) 810-1908
Bobby Ebeier	District Landman	(817) 688-0712	(817) 923-0306	(817) 810-1987

COMPANY NAME	SERVICE	CONTACT PERSON	TELEPHONE NO.
Patterson., Midland, TX	Sales	Steve McCoy	(432)-682-9401
Patterson Rig #65	Rig Floor		(505) 390-7108
	Tool Pusher	Robert Lambright	(505) 420-0801
Suttles Logging, Inc. – Midland, TX	Mudlogging	Sam Samford	432-687-3148
Schlumberger-Artesia, NM	Cementing Service	Lynn Northcutt	(505)-748-1392 cell 505-365-7510
Nova Mud, Inc- Hobbs, NM	Drlg Mud	Dale Welch	(800) 530-8786
National – Hobbs, NM	Well Heads		(505) 393-9928
Master Tubulars – Midland, TX	Casing & Tubing	Randy Martin	(800) 682-8996
TFH –Hobbs, NM	Dirt Contractor		(505) 397-3270
Schlumberger –Artesia, NM	Float Equipment		
Halliburton Logging –Hobbs, NM	Open Hole Logs	Michael Escriva Tommy Johnson	(505) 392-7543
Allen's Casing Crew -Hobbs, TX	Csg Crew		
CRI –Odessa, TX	Closed Mud System	Larry Parker	(505) 631-6984
I&W- Carlsbad, TX	Water -		(505) 885-6663
SWACO-Odessa, TX	Mud Cleaning	Keith Solley	(915) 550-2944
National –Hobbs, NM	General Supplies		(505) 393-9928
TFH –Hobbs, NM	Fork Lift		(505) 397-3270

DRILLING PROGNOSIS

SL	: TELEDYNE 12 FEDERAL #2
	: 1980' FSL and 990' FWL, Sec 12-T23S-R28E
COUNTY	: EDDY COUNTY
STATE	: NEW MEXICO

AFE	:
FIELD	: LOVING EAST
OBJECTIVE	: BRUSHY CANYON
TD	: 6500' MD
PERMIT NO	:

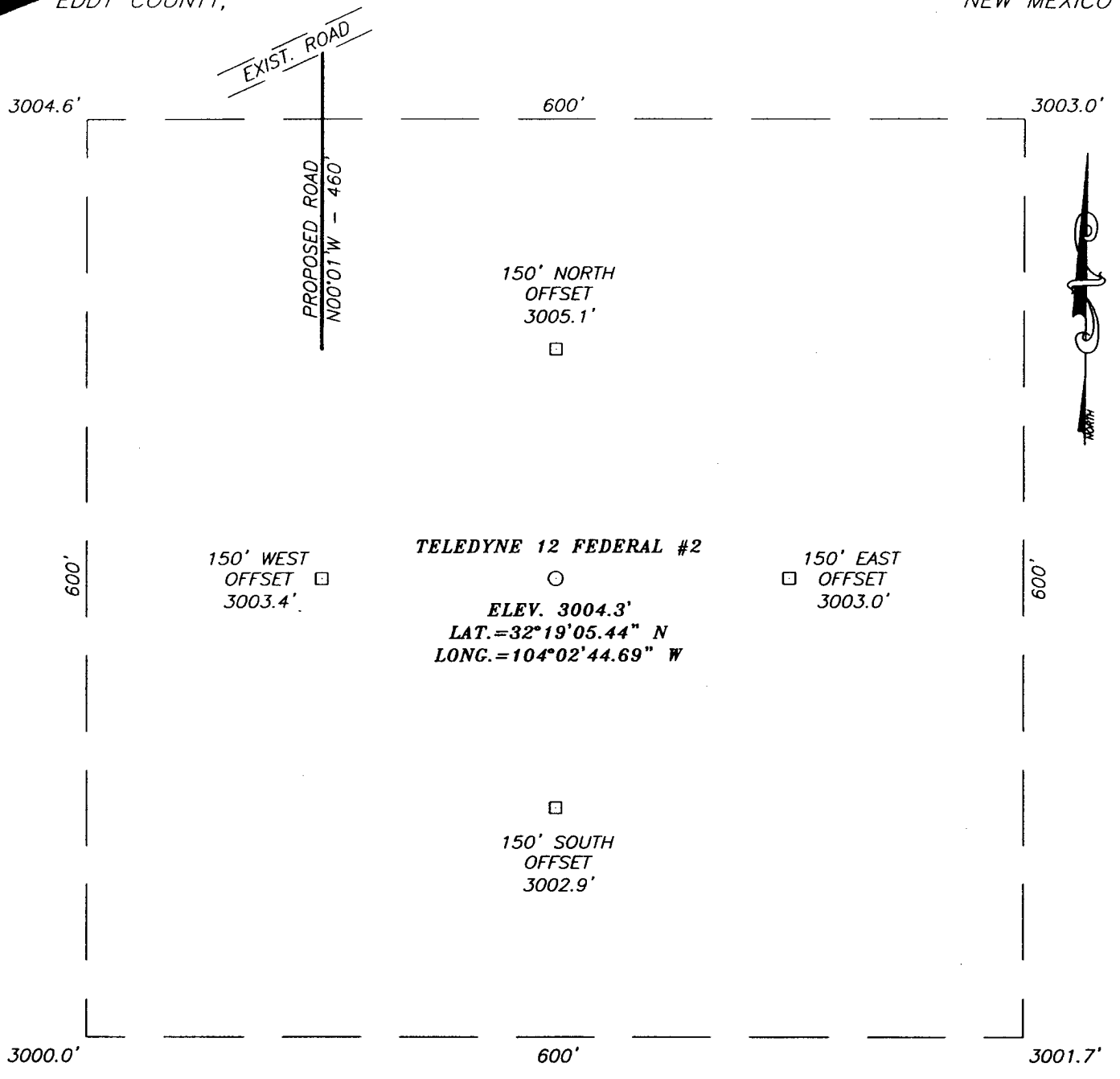
RB OPERATING COMPANY

HOLE SIZE	GL=3004' KB =13' AGL	FORMATION TOPS	LOGS & CASING	MUD WEIGHT
			14" Conductor- Preset	
12 1/4"				8.5-9.0 ppg WBM
	300'		8-5/8", 24#, J-55, STC (0-300')	
7-7/8"			Mudlogger on location @ 2500'	
(POTENTIAL)	4670'	Pardue		10.0-10.2 ppg WBM (Brine)
(OBJECTIVE)	5905'	Brushy Canyon "A"		
(OBJECTIVE)	5990'	Brushy Canyon "B"		
(OBJECTIVE)	6105'	Brushy Canyon "C"		
(OBJECTIVE)	6170'	Brushy Canyon "D"		
			RESISTIVITY/SONIC/ NEUTRON-DENSITY/GR RFT'S ROTARY SIDEWALLS	
	6500'		5-1/2", 15.5#, J-55, LTC (0'-6400')	

DKR - 11/30/04

...N 12, TOWNSHIP 23 SOUTH, RANGE 28 EAST, N.M.P.M.,

EDDY COUNTY, NEW MEXICO



DIRECTIONS TO LOCATION

FROM THE INTERSECTION OF STATE HIGHWAY #31 (POTASH MINES) AND CO. RD. #731 (FISHERMAN'S LANE) GO SOUTHWEST ON STATE HIGHWAY #31 FOR 0.5 MILES TO A CALICHE ROAD ON THE EAST SIDE OF TANK BATTERY. FOLLOW ROAD AROUND BACK OF TANKS THEN VERE NORTH FOR 100'± TO EL PASO BPL. FOLLOW TWO TRACK ROAD FOR 0.35 MILES. THIS LOCATION IS 460' SOUTH.

100 0 100 200 Feet

Scale: 1"=100'

PROVIDING SURVEYING SERVICES
SINCE 1946
JOHN WEST SURVEYING COMPANY
412 N. DAL PASO
HOBBS, N.M. 88240
(505) 393-3117

R.B. OPERATING

TELEDYNE 12 FEDERAL #2 WELL
LOCATED 1980 FEET FROM THE SOUTH LINE
AND 990 FEET FROM THE WEST LINE OF SECTION 12,
TOWNSHIP 23 SOUTH, RANGE 28 EAST, N.M.P.M.,
EDDY COUNTY, NEW MEXICO.

Survey Date: 10/13/04	Sheet 1 of 1 Sheets		
W.O. Number: 04.11.1330	Dr By: LA	Rev 1:N/A	
Date: 10/14/04	Disk: CD#3	04111330	Scale: 1"=100'

Multi-Point Surface Use Operating Plan
RB Production Company
Teledyne 12 Fed #2

This plan is submitted with form 3160-3, Applications for Permit to Drill, covering the above described well. The purpose of this plan is to describe the location of the proposed well, and the proposed construction. And the procedures to be followed in rehabilitation of the surface after completion of the operations, so that a complete appraisal can be made of the environmental affects associated with the operation.

1. Existing Roads:

   A. Exhibit A is a portion of a road map showing the location of the proposed well. The proposed location is situated approximately 3 miles Northeast of Loving, New Mexico.

   B. Directions:
   From the intersection of St. Hwy. 31 and Co. Rd. 731 (Fisherman's Lane) go southwest on St. Hwy. 31 for 0. 5 miles on the east side of tank battery. Follow road around back of tanks then vere north for +/-100' to El Paso BPL. Follow two track road for 0.35 miles. This location is +/-460' to the south.

2. Planned Access Road

   A. Approximately 440' of new road will be constructed on flat terrain as per BLM specifications.

3. Location of Existing Wells:

   A. There are no existing wells in the vicinity as shown on Exhibit B

4. Location of Existing and/or Proposed Facilities

   A. The layout of the well pad, drilling rig and reserve pit are shown in Exhibit C.

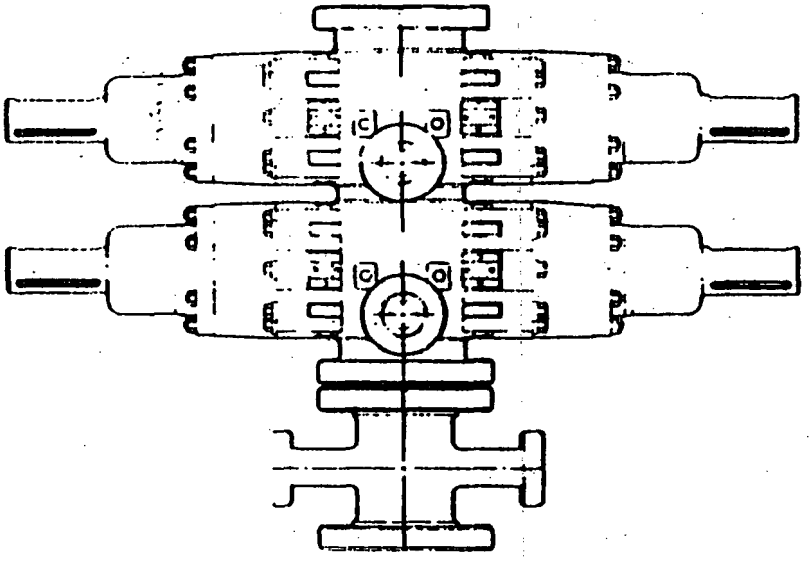
   B. In the event that this well is productive, the tank battery and production facilities will be constructed on the well pad.

   C. The production facility will consist of two 500 bbl steel oil storage tanks, one 300 bbl closed top fiberglass tank, one separator and one heater treater.

5. Location and Type of Water Supply:

   A. The well is to be drilled with both fresh and brine water to be hauled to

PREVENTION EQUIPMENT



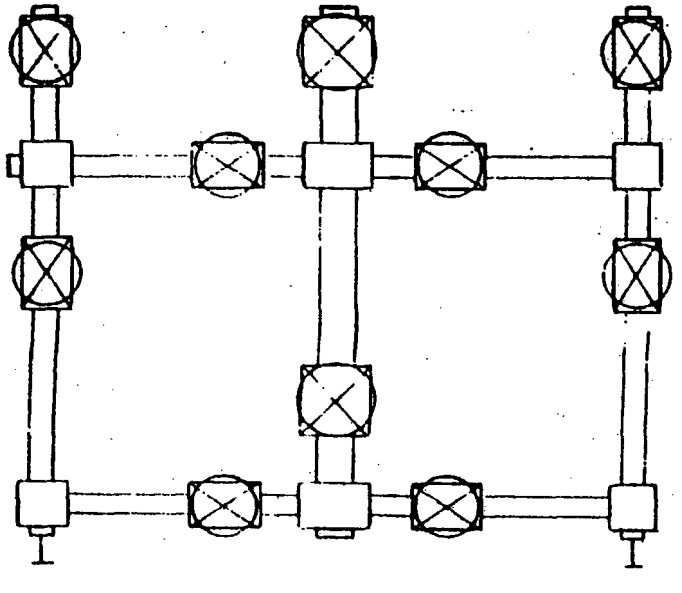
BOP Stack

— 1 Rucker Shaffer "B" double ram
10" - 3000 psi WP

Closing Unit

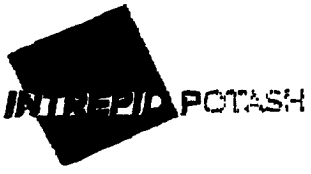
— Hydril model 80 three station accumulator
— Controls located in accumulator house and on rig floor

CHOKE MANIFOLD



900 Series. 3000 psi WP

Exhibit D



January 27, 2005

BLM – Carlsbad Field Office
620 E. Greene St.
Carlsbad, NM 88220

Attention: Mr. Joe Lara

Re: Teledyne 12 Federal #2 Well
1,980' FSL and 990' FWL
Section 12, T23S-R28E
Eddy County, New Mexico

Dear Joe:

As you know, Intrepid Potash – NM, LLC is the surface owner of the aforementioned land description. Intrepid Potash has no objections to the proposed location of the Teledyne 12 Federal #2 Well.

Please call me at (505-234-3814) if you have any questions or concerns regarding this well.

Sincerely,

Thomas A. McGuire
Senior Mine Engineer

cc:

RB OPERATING COMPANY
Mr. Robert Ebeier (Senior Landman)
777 Main St. Suite 800
Fort Worth, TX 76102