Form 3160-5
(March 2012)

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FEB 28 2014

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0137
Expires: October 31, 2014

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE *– Other instructions on page 2.*

1. Type of Well ☑ Oil Well ☐ Gas Well ☐ Other	5. Lease Serial No. SF081347
	6. If Indian, Allottee or Tribe Name
	7. If Unit of CA/Agreement, Name and/or No.
	8. Well Name and No. FEDERAL 17-2
2. Name of Operator ENERDYNE LLC	9. API Well No. 30-039-22498
3a. Address P.O. BOX 502, ALBUQUERQUE, NM 87103 3b. Phone No. *(include area code)* 1-505-414-8548	10. Field and Pool or Exploratory Area WEST LINDRITH GALLUP/DAKOTA
4. Location of Well *(Footage, Sec., T.,R.,M., or Survey Description)* 2310' FNL & 2300' FEL, SECTION 17, T25N, R3W	11. County or Parish, State RIO ARRIBA

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☑ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☐ Subsequent Report	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☑ Other PUMP CHANGE & CLEAN OUT
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.)

PROCEDURE ATTACHED.

RCVD MAR 5 '14
OIL CONS. DIV.
DIST. 3

14. I hereby certify that the foregoing is true and correct. Name *(Printed/Typed)*
DON L. HANOSH

Title MEMBER

Signature

Date 02/26/2014

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by Original Signed: Stephen Mason	Title	Date MAR 0 3 2014
Conditions of approval, if any, are attached. Approval of this notice 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.	Office	

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)

NMOCD

DIAMOND DERRICK ENGINEERING

Federal 17 #2 Gallup/Dakota
Fishing/Rod Pump Procedure
Township 024N Range 003W
Section 17 2310' FNL & 2300' FEL
Rio Arriba County, NM

PBTD: 7450'; Top of Fish: 7068'

1. Hold safety meeting. Comply with all NMOCD, BLM and company safety and environmental regulations. Test rig anchors prior to moving in rig.

2. MIRU. Check casing and tubing pressures and record. RU blow lines from casing valves and begin blowing down casing pressure. Pressure test the tubing to 500 psi.

3. TOOH with rods and pump recording rod configuration. Inspect pump and note findings.

4. ND WH, tie back, release tubing anchor (set in 12,000# tension), NU BOP. TOOH with tubing:

   196 – 2-3/8" 4.7# J-55 EUE tubing joints
   1 – 2/38" tubing anchor set at 5989' KB
   20 – 2-3/8" 4.7# J-55 EUE tubing joints
   1 – 2-3/8" seating nipple
   1 – 2-3/8" x 4' perforated tubing sub
   1 – 2-3/8" x 25' mud anchor sub

5. Make note of corrosion and/ or scale and other findings. Send 25' mud anchor sub to John Crane to add a ¼" bleeder hole below the upset.

6. PU 6 joints wash over pipe dressed with cut-right and 6 - 3-1/8" drill collars on 2-3/8" tubing and TIH to wash over top of fish (last recorded tag depth ~7068'). CO over top of fish to RBP @ 7200' if possible.

7. TOOH w/ wash over pipe and evaluate condition of cut-right/wear pattern on pipe. If wear confirms, TIH w/ overshot on 2" grapple and 3' extension, jars, bumper sub and 6 – 3-1/8" drill collars. Engage fish and attempt to jar free.

8. If fish is retrieved, TOOH w/ overshot and fish and LD same. If fish cannot be retrieved, continue fishing operations at the operator's/engineer's discretion. Fishing contingencies that have been discussed include free-pointing tubing on top of fish and chemical cutting to remove free tubing and allow more efficient jarring of RBP. At end of fishing operations, TOOH and LD fishing tools.

9. If fish was removed, TIH with tubing bailer, clean out to PBTD @ 7450'. If sand or scale is hard packed call engineer to discuss picking up air package or nitrogen membrane unit to clean out to PBTD. If scale on tubing contact engineer for acid volume, concentration and displacement volume. TOOH.

10. TIH with 2-3/8" production tubing as follows:

FISH REMOVED – land at 7407'

1 – 2-3/8" x 25' cover joint (use existing cover joint with bleeder hole added if condition is satisfactory)1 – 2-3/8" seating nipple set at 7392' (even with bottom Dakota perforation) 237 – 2-3/8"4.7# J-55 EUE tubing joint

FISH IN PLACE – land at 6585'

1 – 2-3/8" x 25' cover joint (use existing cover joint with bleeder hole added if condition is satisfactory)1 – 2-3/8" seating nipple set at 6560' (10' below bottom Gallup perforation) 210 – 2-3/8" 4.7# J-55 EUE tubing joints

11. ND BOP, NU B-1 Adapter, rod rattigan, and flow tee (place rod rattigan below flow tee). RIH with rods and pump as described below:

FISH REMOVED

1 – 1" x 6' dip tube (NEW – Energy Pump and Supply)

1- 2" X 1-1/4" X 11' X 15' RHBC-Z HVR, NC PID BBL., 6' SM PLGR - .004 = -.005 FIT TITANIUM BALLS / NICKEL CARBIDE SEATS, DOUBLE VALVE SV ONLY A / A, REGULAR STEEL FITTINGS, 3/4" PIN, 1-5/8" FISH NECK, SAND SEAL BRUSH TOP (NEW – Energy Pump and Supply)

1 – 1"x1' lift sub (NEW, attached to pump – Energy Pump and Supply)

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1 – ¾" x 8' guided rod sub with molded guides (NEW – John Crane)

1 – 26,000# shear sub (NEW – John Crane)

8 – 1-1/4" sinker bars (NEW – John Crane)

2 – ¾" x 8' pony rods (to rotate one at a time to top of string every pull to distribute wear) (NEW – John Crane)

175 – ¾" plain rods

111 – 7/8" rods (use guides as indicated by wear, only plain or molded guides, not snap on or spiral)

X – 7/8" rod subs as required to space out

1 – ¼" polished rod and liner

Rod rotator (NEW – John Crane)

FISH IN PLACE

1 – 1" x 6' dip tube (NEW – Energy Pump and Supply)

1- 2" X 1-1/4" X 11' X 15' RHBC-Z HVR, NC PID BBL., 6' SM PLGR - .004 = -.005 FIT TITANIUM BALLS / NICKEL CARBIDE SEATS, DOUBLE VALVE SV ONLY A / A, REGULAR STEEL FITTINGS, 3/4" PIN, 1-5/8" FISH NECK, SAND SEAL BRUSH TOP (NEW – Energy Pump and Supply)

1 – 1"x1' lift sub (NEW, attached to pump – Energy Pump and Supply)

1 – ¾" x 8' guided rod sub with molded guides (NEW – John Crane)

1 – 26,000# shear sub (NEW - John Crane)

7 – 1-1/4" sinker bars (NEW – John Crane)

2 – ¾" x 8' pony rods (to rotate one at a time to top of string every pull to distribute wear) (NEW – John Crane)

175 – ¾" plain rods

77 – 7/8" rods (use guides as indicated by wear, only plain or molded guides, not snap on or spiral)

X – 7/8" rod subs as required to space out

1 – ¼" polished rod and liner

Rod rotator (NEW – John Crane)

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12. Space out and seat pump by lowering to a LIGHT tag, mark the position of the tag on the polished rod and lift the polished rod using 0.5"/1000' (One half inch per 1000 ft) spacing (~1"). Do NOT set pump to tag.

13. Load tubing with water to pressure test tubing and pump to 500 psi. Test for good pump action.

14. Notify lease operator that well is ready to be returned to production. RDMO.

Contacts:

Energy Pump and Supply
Gary Noyes
505 564-2874
505 330-1932

John Crane
Sean Moore
505 486-3708

Recommended by:

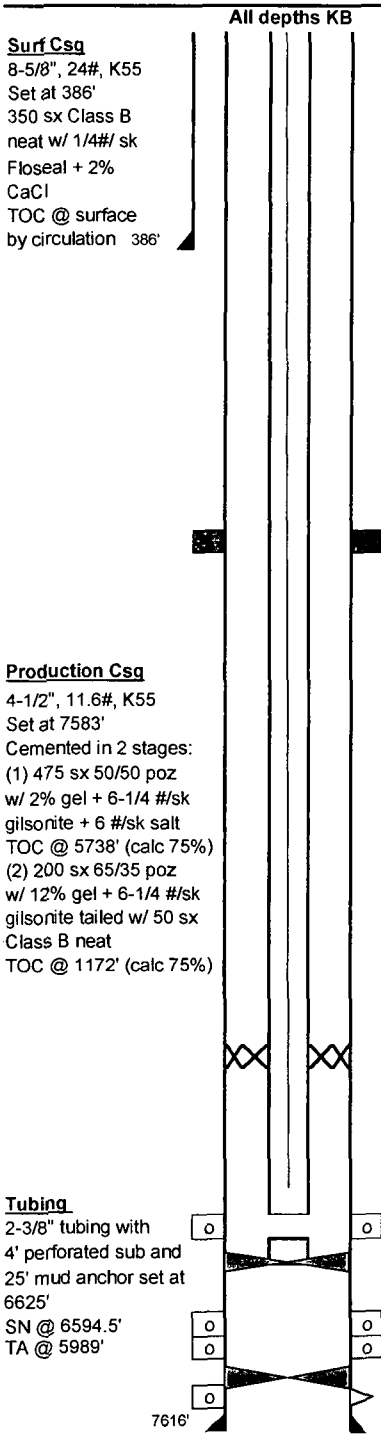
Catlain Richardson

Catlain Richardson
Production Engineer
505 320-3499

DIAMOND DERRICK ENGINEERING

Wellbore Schematic

Well Name:	Federal 17 #2	Date Prepared:	2/20/2014
Location:	G-17-24N-03W	Last Updated:	
County:	Rio Arriba	Spud Date:	12/15/1980
API #:	30-039-22498	Completion Date:	2/28/1981
Co-ordinates:		Last Workover Date:	Jul-08
Elevations:	GROUND: 6825'		
	KB: 6839'		
Depths (KB):	PBTD: 7450' (top of fish @ ~7068')		
	TD: 7616'		



Surface Casing: (12/16/1980)

Drilled 12-1/4" surface hole to ~386'. Set 8-5/8", 24#, K55 casing at 386' KB.
Cemented w/ 350 sx Class B neat w/ 1/4 #/sk Floseal + 2% CaCl
Cement circulated to surface

Production Casing: (9/06/1987)

Drilled 7-7/8" hole to 7616'. Set 263 joints 4-1/2", 11.6#, K-55 casing @ 7583' KB.
Stage tool at 3309.16' KB

Cemented in 2 stages:
Stage 1 cemented with 475 sx 50/50 poz w/ 2% gel + 6-1/4 #/sk gilsonite + 6 #/sk salt
TOC at 5890' per CBL: questionable bond throughout 1st stage of cement job
Stage 2 cemented with 200 sx 65/35 poz w/ 12% gel + 6-1/4 #/sk gilsonite and 50 sx Class B neat
TOC at 1172' KB by calculation w/ 75% efficiency and 1.18 cf/sk yield

Tubing: (7-23-2008)

	Length (ft)
196 - 2-3/8" tubing joints	5977.4
1 - 2-3/8" tubing anchor @ 5989' KB	3.03
20 - 2-3/8' tubing joints	602.07
1 - 2-3/8" seating nipple @ 6594.50' KB	1.10
1 - 2-3/8" x 4' perforated tubing sub	4.22
1 - 2-3/8" x 25' mud anchor sub	25.34
Set at	6625.16 ft (KB)

Rods: date rods were run is unknown, **this is not the current rod string*****

175 - 3/4" plain rods	4375
42 - 7/8" scrapered rods	1050
1 - 8' pony rod (assumed 7/8")	8
1 - 2' pony rod (assumed 7/8")	2
Set at	5449.00 ft (KB)

Perforations:

Gallup (1992): 6384'-96', 6400'-98', 6502'-6550' @ 1 spf; frac'd in two stages (depths of stages unspecified): (1) 57,700 gal x-linked gel with 126,000# 20/40 sand and (2) 38,000 x-linked gel with 308,000# 20/40 Brady sand
Gallup (2008): re-perforated 6390'-6410' and added 6350'-6360' and 6375'-6385'; acidized with 1,000 gals 15% HCl
Dakota (1981): 7276'-96', 7310'-22' @ 2 spf; frac'd with 88,000 gals slick water and 80,000# 20/40 sand
Dakota (1981): 7378'-82', 7380'-92' @ 4 spf; acidized with 1,600 gals 15% HCl and frac'd with 44,000 gals slick water and 40,000# 20/40 sand
Dakota (1981): 7476'-98' @ 4 spf; acididzed with 2,200 gals 7-1/2% HCL; swabbed and recovered 100% water; set CIBP @ 7450' (still in place)

Initial Test:

(3-12-1981, DK) Flowing 24 hour test: 200 bbls oil (24 hr), 398 mcf gas (24 hr), no given water, oil gravity or oil/water ratio
(9-14-1992, GLP) Pumping 24 hour test: 1 bbl oil (24 hr), 0 mcf gas (24 hr), 10 bbl water (24 hr)

Formations:

Ojo Alamo	2593'
Pictured Cliffs	2970'
Mesaverde	4725'
Gallup	6334'
Dakota	7251'
Burro Canyon	7560'

Additional Notes:

- Squeeze holes @ 7522'-24' cemented with 180 sx Class B neat after CBL (2-13-1981) showed no cement behind pipe from 7490'-TD
- CIBP @ 7450' plugging lower Dakota perforations
- Fish in hole since 1992 - RBP @ 7200' with ~ 140' 2-3/8" tubing for a TOF at ~7068'
- Attempted fising operations in 2008 consisting of jarring from surface with washover pipe and jarring down hole with overshot with grapple; attempted to release RBP safety sub with rotation