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

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State of New Mexico
Energy, Minerals and Natural Resources Department
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-144 CLEZ
July 21, 2008

For closed-loop systems *that only use above ground steel tanks or haul-off bins and propose to implement waste removal for closure*, submit to the appropriate NMOCD District Office.

Closed-Loop System Permit or Closure Plan Application

(that only use above ground steel tanks or haul-off bins and propose to implement waste removal for closure)

Type of action: ☑ Permit ☐ Closure

Instructions: Please submit one application (Form C-144 CLEZ) per individual closed-loop system request. For any application request other than for a closed-loop system that only use above ground steel tanks or haul-off bins and propose to implement waste removal for closure, please submit a Form C-144.

Please be advised that approval of this request does not relieve the operator of liability should operations result in pollution of surface water, ground water or the environment. Nor does approval relieve the operator of its responsibility to comply with any other applicable governmental authority's rules, regulations or ordinances

1.
Operator: ConocoPhillips Company OGRID #: 217817
Address: P.O. Box 51810, Midland, Texas 79710-1810
Facility or well name: Hardy 36 State #19
API Number: 30-025-33202 OCD Permit Number: P1-01377
U/L or Qtr/Qtr H Section 36 Township 20S Range 37E County: Lea
Center of Proposed Design: Latitude _____ Longitude _____ NAD: ☐1927 ☐ 1983
Surface Owner: ☐ Federal ☑ State ☐ Private ☐ Tribal Trust or Indian Allotment

2.
☑ **Closed-loop System:** Subsection H of 19.15.17.11 NMAC
Operation: ☐ Drilling a new well ☑ Workover or Drilling (Applies to activities which require prior approval of a permit or notice of intent) ☐ P&A
☑ Above Ground Steel Tanks or ☑ Haul-off Bins

3.
Signs: Subsection C of 19.15.17.11 NMAC
☐ 12"x 24", 2" lettering, providing Operator's name, site location, and emergency telephone numbers
☑ Signed in compliance with 19.15.3.103 NMAC

4.
Closed-loop Systems Permit Application Attachment Checklist: Subsection B of 19.15.17.9 NMAC
Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.
☑ Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
☑ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
☑ Closure Plan (Please complete Box 5) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC
☐ Previously Approved Design (attach copy of design) API Number: _____
☐ Previously Approved Operating and Maintenance Plan API Number: _____

5.
Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only: (19.15.17.13.D NMAC)
Instructions: Please indentify the facility or facilities for the disposal of liquids, drilling fluids and drill cuttings. Use attachment if more than two facilities are required.
Disposal Facility Name: Controlled Recovery Disposal Facility Permit Number: ~~R9166~~ NM-01-0006
Disposal Facility Name: _____ Disposal Facility Permit Number: _____
Will any of the proposed closed-loop system operations and associated activities occur on or in areas that *will not* be used for future service and operations?
☐ Yes (If yes, please provide the information below) ☑ No

Required for impacted areas which will not be used for future service and operations:
☐ Soil Backfill and Cover Design Specifications - - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC
☐ Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC
☐ Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

6.
Operator Application Certification:
I hereby certify that the information submitted with this application is true, accurate and complete to the best of my knowledge and belief.
Name (Print): Justin C. Firkins Title: Regulatory Specialist
Signature: Justin C. Firkins Date: 09/25/2009
e-mail address: justin.c.firkins@conocophillips.com Telephone: 432-688-6913

7.
OCD Approval: ☒ Permit Application (including closure plan) ☐ Closure Plan (only)

OCD Representative Signature: _____ **Approval Date:** 09/29/09

Title: Geologist **OCD Permit Number:** P1-01377

8.
Closure Report (required within 60 days of closure completion): Subsection K of 19.15.17.13 NMAC

Instructions: Operators are required to obtain an approved closure plan prior to implementing any closure activities and submitting the closure report. The closure report is required to be submitted to the division within 60 days of the completion of the closure activities. Please do not complete this section of the form until an approved closure plan has been obtained and the closure activities have been completed.

☐ **Closure Completion Date:** _____

9.
Closure Report Regarding Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only:

Instructions: Please indentify the facility or facilities for where the liquids, drilling fluids and drill cuttings were disposed. Use attachment if more than two facilities were utilized.

Disposal Facility Name: _____ Disposal Facility Permit Number: _____

Disposal Facility Name: _____ Disposal Facility Permit Number: _____

Were the closed-loop system operations and associated activities performed on or in areas that *will not* be used for future service and operations?

☐ Yes (If yes, please demonstrate compliance to the items below) ☐ No

Required for impacted areas which will not be used for future service and operations:

☐ Site Reclamation (Photo Documentation)
☐ Soil Backfilling and Cover Installation
☐ Re-vegetation Application Rates and Seeding Technique

10.
Operator Closure Certification:

I hereby certify that the information and attachments submitted with this closure report is true, accurate and complete to the best of my knowledge and belief. I also certify that the closure complies with all applicable closure requirements and conditions specified in the approved closure plan.

Name (Print): _____ Title: _____

Signature: _____ Date: _____

e-mail address: _____ Telephone: _____

ConocoPhillips Company
Closed Loop System Design, Operating and Maintenance, and Closure Plan

Well: Hardy 36 State #19

Date: September 25, 2009

ConocoPhillips proposes the following plan for design, operating and maintenance, and closure of our proposed closed loop system for the above named well:

1. We propose to use a closed loop system with steel pits, haul-off bins, and frac tanks for containing all cuttings, solids, mud, water, brine, and liquids. We will not dig a pit, nor will we use a drying pad, nor will we build an earth pit above ground level, nor will we dispose of or bury any waste on location.

   All drilling waste and all drilling fluids (fresh water, brine, mud, cuttings, drill solids, cement returns, and any other liquid or solid that may be involved) will be contained on location in the rig's steel pits or in haul-off bins or in frac tanks as needed. The intent is as follows:
   - We propose to use the rigs' steel pits for containing and maintaining the drilling fluids.
   - We propose to remove cuttings and drilled solids from the mud by using solids control equipment and to contain such cuttings and drilled solids on location in haul-off bins.
   - We propose that any excess water that may need to be stored on location will be stored in frac tanks.

   The closed loop system components will be inspected daily by each tour and any needed repairs will be made immediately. Any leak in the system will be repaired immediately, and any spilled liquids and / or solids will be cleaned up immediately, and the area where any such spill occurred will be remediated immediately.

2. Cuttings and solids will be removed from location in haul-off bins by an authorized contractor and disposed of at an authorized facility. For this well, we propose the following disposal facility:

   Controlled Recovery Inc,
   4507 West Carlsbad Hwy, Hobbs, NM 88240,
   P.O. Box 388 Hobbs, New Mexico 88241
   Toll Free Phone: 877.505.4274, Local Phone Number: 432-638-4076

   The physical address for the plant where the disposal facility is located is Highway 62/180 at mile marker 66 (33 miles East of Hobbs, NM and 32 miles West of Carlsbad, NM).

   The Permit Number for CRI is R9166

   A photograph showing the type of haul-off bins that will be used is attached.

3. Mud will be transported by vacuum truck and disposed of at Controlled Recovery Inc at the facility described above.

4. Fresh Water and Brine will be hauled off by vacuum truck and disposed of at an authorized salt water disposal well. We propose the following for disposal of fresh water and brine as needed:

   - Nabors Well Services Company, 3221 NW County Rd, Hobbs, NM 88240, PO 5208 Hobbs, NM, 88241, Permit SWD 092. (Well Location: Section 3, T19S R37E)

   - Basic Energy Services, PO Box 1869 Eunice, NM 88231 Phone Number 575 394 2545, Facility located at Hwy 18, Mile Marker 19, Eunice, NM.

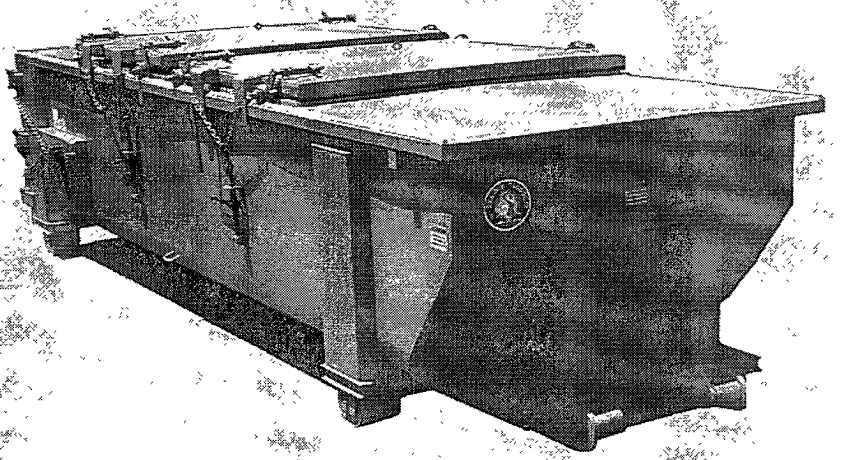
   - Key Energy Services, 2105 Avenue O, Eunice, NM 88231, Phone Number 505 394 2585 (Atha Well, Section 31 T21S R36E, BLM Permit # LC036441) (Christmas Well, Unit B, Section 28, T22S R37E, State Permit # SWD # 606)

Jason D. Tilley, Sr. Drilling Engineer
ConocoPhillips Company, 600 North Dairy Ashford, Room # 2WL-13016, Houston, TX 77079-1175
Office Phone 832 486 2919, Cell Phone 281 684 4720

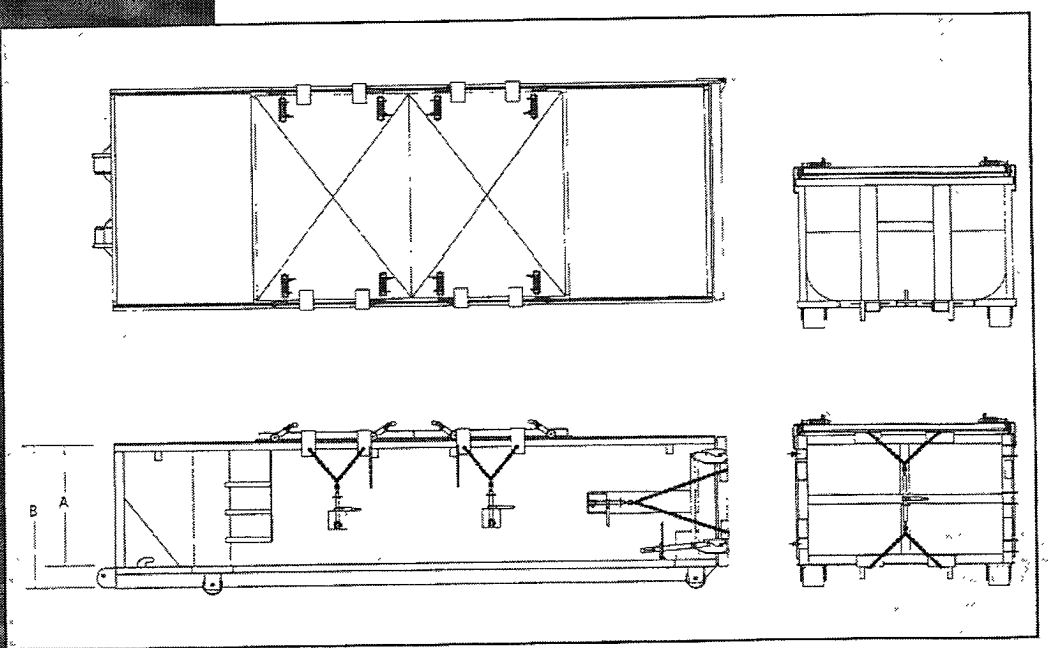
SPECIFICATIONS

FLOOR: 3/16" PL one piece
CROSS MEMBER: 3 x 4.1 channel 16" on center
WALLS: 3/16" PL solid welded with tubing top, inside liner hooks
DOOR: 3/16" PL with tubing frame
FRONT: 3/16" PL slant formed
PICK UP: Standard cable with 2" x 6" x 1/4" rails, gusset at each crossmember
WHEELS: 10 DIA x 9 long with rease fittings
DOOR LATCH: 3 Independent ratchet binders with chains, vertical second latch
GASKETS: Extruded rubber seal with metal retainers
WELDS: All welds continuous except sub-structure crossmembers
FINISH: Coated inside and out with direct to metal, rust inhibiting acrylic enamel color coat
HYDROTESTING: Full capacity static test
DIMENSIONS: 22'-11" long (21'-8" inside), 99" wide (88" inside), see drawing for height
OPTIONS: Steel grit blast and special paint, Ampliroll, Heil and Dino pickup
ROOF: 3/16" PL roof panels with tubing and channel support frame
LIDS: (2) 68" x 90" metal rolling lids spring loaded, self raising
ROLLERS: 4" V-groove rollers with delrin bearings and grease fittings
OPENING: (2) 60" x 82" openings with 8" divider centered on container
LATCH: (2) independent ratchet binders with chains per lid
GASKETS: Extruded rubber seal with metal retainers

Heavy Duty Split Metal Rolling Lid



CONT.	A	B
20 YD	41	53
25 YD	53	65
30 YD	65	77



HARDY 36 STATE #19

WBS ELEMENT – WA5.CNM.____

WellView Well Name – **HARDY 36 STATE #19**

Re-Completion Procedure

August 12, 2009

Objective: Add the Blinebry formation to the existing completion.

COPC WI: 100%	COPC NRI: 87.5%	
Well Status: Prod	Well Type: Oil Well	County: Lea
Area: Permian	Field: Strawn	Team: Permian Oil
Venting: Permit not required	Flaring: Permit not required	H_2S: Possible
Well Control: Class 2 Category 2	(post perforating & post stimulation)	

IMPORTANCE OF SAFETY

Safe operations are of utmost importance at all ConocoPhillips properties and facilities. To further this goal, the ConocoPhillips Supervisor at the location shall request tailgate safety meetings prior to initiation of work and also prior to any critical operations. All company, contract, and service personnel then present shall attend these tailgate safety meetings at the location. All parties shall review the proposed upcoming steps, procedures, and potentially hazardous situations. Occurrence of these meetings shall be recorded in the Well View daily report.

History / Justification

The Hardy 36 State #19 was originally drilled to 6960' in February 1996. The well was completed In the Tubb from 6442-6536' and frac'd with 230,650# of 16/30 sand. The Tubb has produced 30,097 BO and 136,210 Mcf thru February 2009 according to Dwight's PI. The last test of the Tubb was 8/25/09; the well was making 2 BO, 6 BW and 0.4 Mcf. It is proposed to add the Blinebry formation from 5652-5685' to the existing Tubb completion.

An initial rate of 10 BOPD with 10 Mcf/d is projected based upon the initial rates of the offset wells. Economics were performed using an exponential decline rate of 25% per year, a recompletion cost of $200,000, and an operating cost of $7.92/BOE per year. ConocoPhillips owns a 100% WI and a NRI of 87.5% in the Hardy State lease. This project yields an ATAX ROR of 42.6% with a NPV of $89M at 13%.

Hardy 36 State #19
Add Blinebry to existing completion

AFE Number: WA5.CNM.____

API Number: 30-025-33202

Field: North Hardy Tubb Drinkard

Location: 1950' FNL & 330' FEL, Sec. 36, T-20-S, R-37-E, Lea County, NM

Depths: TD = 6960'

Elevation: GR = 3502' KB = 3513'

Casing Data:

Existing & Proposed Casing, Tubing and Packer Information

	OD (in)	Depth (ft)	ID/Drift (inches)	Weight (#/ft)	Grade	Burst	Burst w/ 1.15 D.F.	Collapse (psi)	Collapse w/ 1.05 D.F.	Volume (Bbls/Ft)
Int. Csg	8⅝	1515'	8 097/7 972	24#	K-55	2950	**2565**	1370	**1305**	.0609
*Prod	5½	6960'	4.950/4 825	15.5#	K-55	4810	**4183**	4040	**3848**	.0232
Prod Tbg	2⅜"		1 995/1 901	4 7#	J-55	7700	**6696**	8100	**7714**	00579

Top of Cement: surface Casing Fluid: 2% KCl (0.438 psi/ft)

Proposed Cased Hole Perforations

Formation	Perforations (MD)	Frac Grad	Perf Feet	SPF	Phase	Zero Hole	Holes	Anticipated Reservoir Pressure	Reservoir Temp
Blinebry	5652-5657'	.75	5	4	60°	No	20	2628	104°
	5668-5671'	.75	3	4	60°	No	12	2636	
	5681-5685'	.75	4	4	60°	No	16	1642	

Correlation Log: Western Atlas Compensated Z-Densilog - Neutron log dated 2/22/1996
Gun Type: 3⅜" High Shot Density, 34JL Ultrajet, HMX 22.7g, (API 19B: Pen – 28.94", EHD - 0.37")

Prepared by: David McPherson: Contract Production Engineer, Panhandle/Permian Group
Mobile: 1(903) 316-4272 Home: 1(903) 894-3547

GENERAL NOTES

1. No project or task is to be performed unless it can be done safely and without harm to the environment. All work must comply with all State and Federal regulations and with COPC Safety and Environmental Policies.

2. Conduct daily safety meetings and review all procedures with all contractors prior to performing the operation.

3. Report all activity on the Well View Daily Completion Work-Over Report.

4. Insure contractors are familiar with and comply with all relevant COPC safety/environmental policies.

5. Spills are to be prevented. Utilize a vacuum truck as necessary.

6. **All references to 2% KCl water is powdered 2% KCl.**

7. Throughout the entire completion process, any fluids from the well-bore that are displaced or produced must be sent through the flow-back equipment so that the fluids can be properly disposed.

8. Verify that all pressured lines and fittings meet or exceed the MPSP (Maximum Predicted Surface Pressure) for the treatment lines of **5250** psi for the pressure test during stimulation operations. Maximum treatment pressure during the acid treatment will be **6000** psi. MPSP from the zone should not be greater than 2000 psi before & after stimulation operations of the Blinebry zones.

9. Well control for this well will be Class 2, Category 2 before and after stimulation. Expected Shut in Casing Pressures (SICP) before & after stimulation should not exceed 2000 psi.

Mid-Continent / Permian / Hobbs East Contact List:

Reservoir Engineer:	D. Pecore	832-486-2145
Production Engineer:	J. Lowder	432-368-1609
Facilities Engineer Tech:	L. Johansen	432-368-1223
Operations Supervisor:	J. Coy	505-391-3127
Projects Planner:	D. Garrett	505-368-1410
Production Foreman:	V. Mackey	505-391-3129

Recommended Procedure

1. MIRU well service unit. POOH with rods & pump. ND wellhead and NU BOP's and test. POOH with 2⅜", 4.7#, J-55 tubing. Scan tubing while pulling. If tubing is acceptable, use 2⅜", 4.7#, J-55 production tubing as workstring, and haul in enough workstring for bit run in Step #2. If tubing is unacceptable, lay down 2⅜", 4.7#, J-55 tubing, send tubing in for inspection, place all inspected yellow and blue band tubing in COPC inventory, and haul in 6930'± of 2⅜", 4.7#, J-55 production tubing and enough workstring for bit run in Step #2.

2. PU and TIH with 4¾" bit on 2⅜", 4.7#, J-55 workstring to 6930'±, circulating well clean with 2% KCL water. Test 2⅜", 4.7#, J-55 workstring to 6500 psi while TIH. POOH with 2⅜", 4.7#, J-55 workstring and bit. Lay down drill bit.

3. MIRU Schlumberger wireline. RU 1000 psi lubricator. Set composite plug at 6000'±. Correlate to Western Atlas Compensated Z-Densilog - Neutron log dated 2/22/1996. RU pump truck and test casing to 1000 psi. RD pump truck. Perforate the Blinebry from 5652-5657', 5668-5671', and 5681-5685' (48 holes) with 4 SPF 60° phasing, using 3⅜" High Shot Density, 34JL Ultrajet, HMX 22.7g, (API 19B: Pen – 28.94", EHD - 0.37"). RD/MO wireline and lubricator.

4. PU 3½", 9.3#, N-80 workstring. TIH with 5½" packer on 3½" workstring. Test 3½" workstring to 7500 psi while TIH. Set packer at 5600'±.

5. Spot two 500 bbl clean, lined frac tanks and fill with 2% KCl. Add biocide to the first load of each tank.

6. MIRU Schlumberger pumping services fracturing equipment. RU and test all lines to 7,500 psi and monitor for 5 min. Make sure the pressure does not decrease more that 300 psi over the 5 min. Pressure up casing / tubing annulus to 300 psi and monitor during job.

7. Perform acid ballout with 1200 gals 15% HCl acid at 6-10 bpm with 70± 1.3 SG bio balls as per attached procedure. When acid is on perfs, bring rate up to 15-16 BPM. Obtain ISIP and 5 minute shut-in pressure. Surge the well 3-4 times to dislodge balls. Shut down for 30 minutes to allow balls to fall.

   Note: It is a ConocoPhillips policy to have shower facilities on location when using acid.

8. Fracture treat the Blinebry with 25,494 gal of YF125ST containing 65,000 lbs of 20/40 sand coated with prop-net as per attached treating schedule. Set treating line pop off at 7000 psi. Set pump trips at 6500 psi. Set annulus pop off at 700 psi. Frac at 30± BPM with maximum wellhead treating pressure of 5500 psi.

9. Obtain ISIP and 5 minute, 10 minute, and 15 minute shut-in pressures. Close Hydraulic Master Valve. RD Schlumberger Iron.

10. Unseat packer and reverse out any excess sand from tubing if flush volume not achieved. POOH with 5½" packer and 3½" workstring. Lay down 3½" workstring.

11. TIH with 4¾" bit on 2⅜" workstring to 6000'±. Circulate out any excess sand from frac job. Drill out composite plug at 6000'±. Continue TIH to PBTD @ 6930'±. When wellbore is clean, POOH with 2⅜" workstring.

12. RIH with the 2⅜" production tubing (per tubing design in Well View). Place the EOT at 6560'± with the tubing anchor at 5600'±. Maintain a dynamic fluid column (DFC) while running tubing. (Trickle some 2% KCl water down the tubing head valve.)

13. ND BOP's and NU wellhead. RIH with pump and rods (per rod design in Well View). Space and hang well on. Load tubing and check pump action.

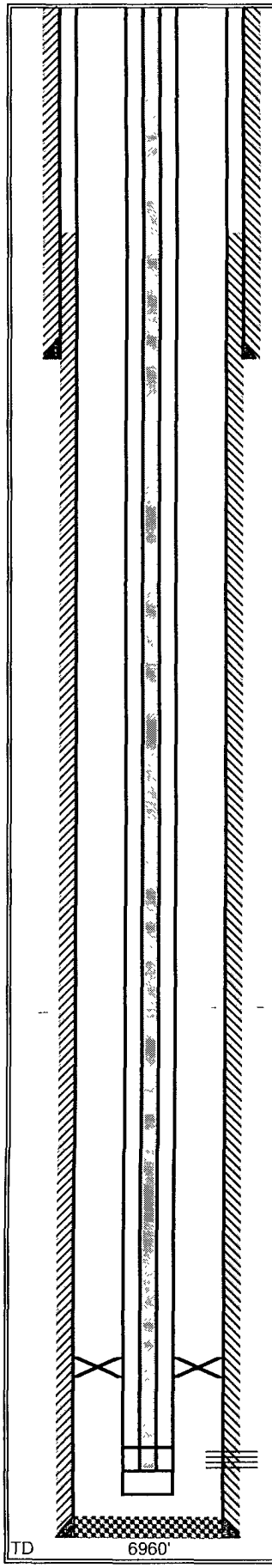
14. RD/MO well service rig. Release any ancillary equipment. Clean up location.

15. Turn well over to Operations. Place well on production. Report well tests on morning report. Place stabilized well test in Field View. Contact chemical representative to place well on corrosion inhibition and scale squeeze program if needed. Submit change of status report.

HARDY 36 STATE #19

CURRENT WELLBORE DIAGRAM

API #:	30-025-33202				
FIELD:	North Hardy Tubb Drinkard				
CO ST:	Lea, NM		**AREA:**	Hobbs East	
SECTION:	36	**TOWNSHIP:**	20S	**RANGE:**	37E
LOCATION:	1950' FNL & 330' FEL				
DATES:	**SPUD:** 1/30/96		**IC:** 3/15/96		
	LATEST RIG WORKOVER:		6/10/03		
	DIAGRAM REVISED:		08/11/09 by D. McPherson		



	CASING			LINER	TUBING
Hole Size	12¼"	7⅞"			
Pipe Size	8⅝"	5½"			2⅜"
Weight	24#	15.5#			4.7#
Grade	K-55	K-55			J-55
Thread					
Depth	1515'	10340'			6582'

ELEVATION:	GR 3502', KB 3513'
TREE CONNECTION:	

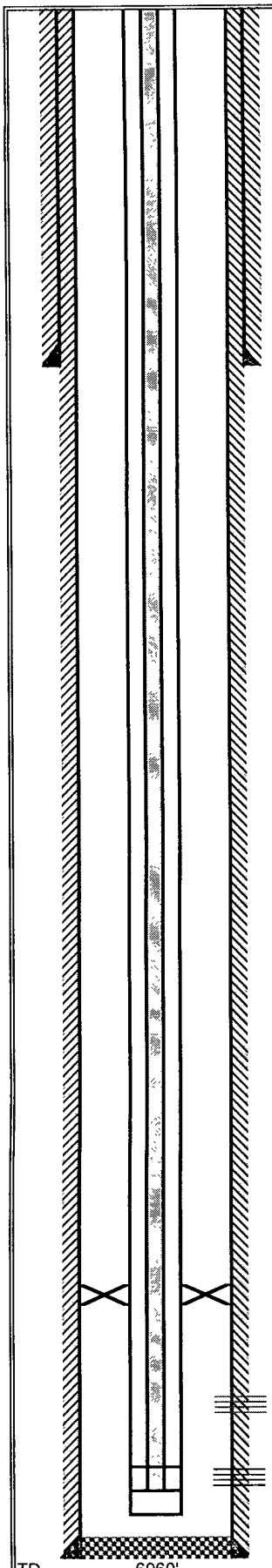
Tubing Description	Length	From	To
Elevation	11.00	0 00	11.00
205 jts 2⅜" 4.7# J-55 tubing	6347.60	11 00	6358.60
TAC	3.00	6358 60	6361 60
5 jts 2⅜" 4.7# J-55 tubing	158.00	6361.60	6519.60
1 jt polyline tbg	32.00	6519.60	6551.60
SN	1.00	6551.60	6552.60
mud jt	30.00	6552 60	6582 60

COMMENTS

HARDY 36 STATE #19

PROPOSED WELLBORE DIAGRAM

API #:	30-025-33202				
FIELD:	North Hardy Tubb Drinkard				
CO ST:	Lea, NM		**AREA:**	Hobbs East	
SECTION:	36	**TOWNSHIP:**	20S	**RANGE:**	37E
LOCATION:	1950' FNL & 330' FEL				
DATES:	**SPUD:** 1/30/96		**IC:** 3/15/96		
	LATEST RIG WORKOVER:		6/10/03		
	DIAGRAM REVISED:		08/11/09 by D. McPherson		



8⅝" @ 1515', cmt w/ 920 sxs

	CASING		LINER	TUBING
Hole Size	12¼"	7⅞"		
Pipe Size	8⅝"	5½"		2⅜"
Weight	24#	15.5#		4.7#
Grade	K-55	K-55		J-55
Thread				
Depth	1515'	10340'		

ELEVATION: GR 3502', KB 3513'
TREE CONNECTION

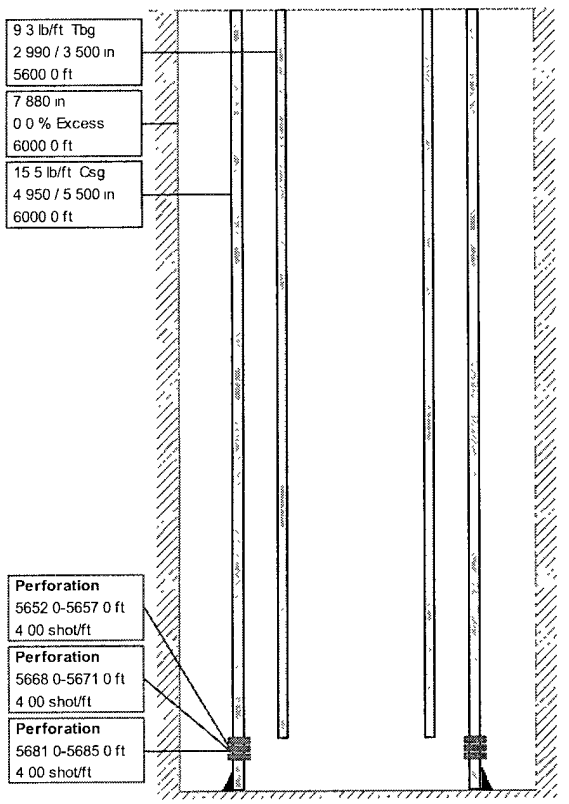
TAC @ 5600'±; EOT @ 6560'±

Blinebry
PERFS 5652-5657', 5668-5671', 5681-5685'

Perfs: 6442-6536' (2 SPF)
Acidized w/ 3000 gals 15% HCL NEFE
Frac'd w/ 230,650# 16/30 SD
5½" @ 6960' cmt w/ 970 sxs

COMMENTS

WELL DATA



Well Data	
Pump Treatment Down	Tubing
Surface Temperature	80 degF
Bottom Hole Static Temperature (BHST)	104 degF
Bottom Hole Pressure (BHP):	
Fracture Gradient:	

Casing

OD	ID	Top Depth	Bottom Depth	Weight	Grade
5.500 in	4.950 in	0.0 ft	6000 0 ft	15 5 lb/ft	K55

Tubing

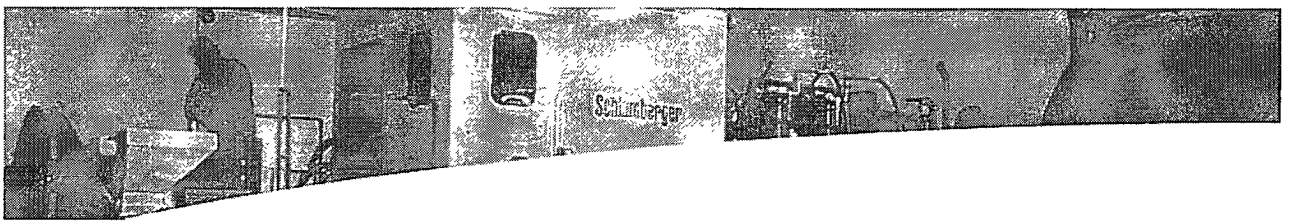
OD	ID	Top Depth	Bottom Depth	Weight	Grade
3.500 in	2.990 in	0.0 ft	5600.0 ft	9 3 lb/ft	N80

Perforations

Top Depth	Bottom Depth	Shot Density	Temperature at Perf
5652.0 ft	5657.0 ft	4.00 shot/ft	
5668.0 ft	5671.0 ft	4 00 shot/ft	
5681.0 ft	5685.0 ft	4 00 shot/ft	

IMPORTANT:
The well data shown on this page is based on information available when this treatment program was prepared. This data must be confirmed on location with the wellsite supervisor prior to the treatment Any changes in the well data need to be reviewed for their impact on the treatment design.

Schlumberger



PROCEDURES

1. MI (Move in) Schlumberger equipment.
2. Conduct Rig-up, Prime-up and pressure test safety meeting.
3. RU (Rig up) Schlumberger equipment and pressure test to customer master valve.
4. Conduct pre-job safety meeting.
5. Perform treatment per design pumping schedule and instructions of client representative.
6. Throughout the entire completion process, any fluids from the well-bore that are displaced or produced must be sent through the flow-back equipment so that the fluids can be properly disposed. This note includes Cross-Link fluid samples during treatment. These are to be emptied in an approved "Metal" bucket (read: Not Plastic!!) and disposed of properly. The practice of pouring said samples on the ground is NOT acceptable.
7. * Remember to cut PropNET when Sand Chief empty thus leaving only the proppant in the hopper remaining prior to flush
8. Pump frac job as per provided Schlumberger Job Procedure as follows:

9. Perform acid ballout with 1200 gals 15% HCl acid at 6-10 bpm with 70± 1.3 SG bio balls as per attached procedure. When acid is on perfs, bring rate up to 15-16 BPM. Obtain ISIP and 5 minute shut-in pressure. Surge the well 3-4 times to dislodge balls. Shut down for 30 minutes to allow balls to fall.
10. Note: It is a ConocoPhillips policy to have shower facilities on location when using acid.
11. Fracture treat the Blinebry with 25494 gal of YF125ST containing 65,000 lbs of 20/40 sand coated with prop-net as per attached treating schedule. Set treating line pop off at 7000 psi. Set pump trips at 6500 psi. Set annulus pop off at 700 psi. Frac at 30± BPM with maximum wellhead treating pressure of 5500 psi.
12. Obtain ISIP and 5 minute, 10 minute, and 15 minute shut-in pressures. Close Hydraulic Master Valve. RD Schlumberger Iron.
13. Conduct post job rig down meeting.
14. Rig down Schlumberger equipment.
15. Conduct convoy meeting and move out Schlumberger equipment.

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PUMPING SCHEDULE

Treatment 1					
Stage Name	**Pump Rate**	**Fluid Name**	**Stage Volume**	**Proppant**	**Prop. Conc**
	bbl/min		gal		PPA
Load Well	5 0	WF110	250		0 0
Ballout	10 0	HCl 15	1200		0.0
Displace	15 0	WF110	2100		0 0
Pad	30 0	YF120ST-NM	8000		0 0
1 0 PPA	30 0	YF120ST-NM	2000	20/40 Jordan-Unimin	1 0
2 0 PPA	30 0	YF120ST-NM	3000	20/40 Jordan-Unimin	2.0
3.0 PPA	30 0	YF120ST-NM	3000	20/40 Jordan-Unimin	3.0
4.0 PPA	30.0	YF120ST-NM	1500	20/40 Jordan-Unimin	4.0
4 0 PPA	30.0	YF120ST-NM	1500	20/40 Jordan + 1.0 %PropNET	4 0
5.0 PPA	30 0	YF120ST-NM	3000	20/40 Jordan + 1.25% PropNET	5.0
6.0 PPA	30 0	YF120ST-NM	3500	20/40 Jordan + 1.5% PropNET	6 0
Flush	30 0	WF110	2095		0 0

Fluid Totals	
WF110	4445 gal
HCl 15	1200 gal
YF120ST-NM	25500 gal

Proppant Totals	
20/40 Jordan-Unimin	23000 lb
20/40 Jordan + 1.0 %PropNET	6000 lb
20/40 Jordan + 1.25% PropNET	15000 lb
20/40 Jordan + 1.5% PropNET	21000 lb

Treatment Execution						
Stage Name	**Stage Liquid Volume**	**Cum. Liquid Volume**	**Stage Prop. Mass**	**Cum. Prop. Mass**	**Stage Time**	**Cum. Time**
	gal	gal	lb	lb	min	min
Load Well	250	250	0	0	1.2	1 2
Ballout	1200	1450	0	0	2.9	4.1
Displace	2100	3550	0	0	3 3	7.4
Pad	8000	11550	0	0	6.3	13.7
1.0 PPA	2000	13550	2000	2000	1 7	15 4
2.0 PPA	3000	16550	6000	8000	2.6	18
3 0 PPA	3000	19550	9000	17000	2.7	20.7
4.0 PPA	1500	21050	6000	23000	1.4	22 1
4.0 PPA	1500	22550	6000	29000	1 4	23 5
5.0 PPA	3000	25550	15000	44000	2.9	26.4
6.0 PPA	3500	29050	21000	65000	3.5	29.9
Flush	2095	31145	0	65000	1 7	31 6

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JOB SUMMARY

Treatment	Fluid		Proppant		Gases
Treatment 1	WF110	4445 gal	20/40 Jordan-Unimin	23000 lb	
	HCl 15	1200 gal	20/40 Jordan + 1.0 %PropNET	6000 lb	
	YF120ST-NM	25500 gal	20/40 Jordan + 1.25% PropNET	15000 lb	
			20/40 Jordan + 1.5% PropNET	21000 lb	

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