

DOYLE HARTMAN

Oil Operator
500 NORTH MAIN
P.O. BOX 10426
MIDLAND, TEXAS 79702

(915) 684-4011
(915) 682-7616 FAX

February 12, 2001

State of New Mexico
Energy, Minerals and Natural Resources Department
New Mexico Oil Conservation Division
811 South First St.
Artesia, NM 88210

Attn: Bryan Arrant

Re: NMOCD Form C-103, Dated February 12, 2001
Doyle Hartman-Operated State "BV" No. 1 Well
S/2 Section 25, T-17-S, R-28-E
South Empire Morrow Pool
Eddy County, New Mexico
[State of New Mexico Lease No. XO647-394 (Formerly Lease No. 647)]



Gentlemen:

Reference is made to the just-completed wellbore repair work and fracture stimulation of the Doyle Hartman-operated State "BV" No. 1 well, located 1800' FSL and 1980' FEL, Section 25, T-17-S, R-28-E, South Empire Morrow Pool, Eddy County, New Mexico.

Reference is also made to Doyle Hartman's letter, to Duke Energy Field Services, L.L.C. (Duke), dated February 8, 2000, regarding Duke's improper notice, of January 24, 2001, that it will disconnect our State "BV" No. 1 gas meter, effective March 1, 2001, due to an alleged (but unsubstantiated) "increased oxygen content" corresponding to our State "BV" No. 1 well.

In regard to our just-completed \$825,000 State "BV" No. 1 wellbore repair and fracture stimulation, and Duke's subsequent improper threat to disconnect (remove), for yet unsubstantiated reasons, our State "BV" No. 1 gas sales meter, effective March 1, 2001,

State of New Mexico
Energy, Minerals and Natural Resources Department
New Mexico Oil Conservation Division
February 12, 2001
Page 2

please find enclosed six copies of our Form C-103, dated February 12, 2001 (with enclosures).

Very truly yours,

DOYLE HARTMAN, Oil Operator



Linda Land
Controller

res
wp7\corresp\state-bv.nmocrd

cc: New Mexico State Land Office
310 Old Santa Fe Trail
P.O. Box 1148
Santa Fe, NM 87504-1148
Attn: Ray B. Powell, Commissioner
Jamie Bailey, Director, Oil, Gas and Minerals Division

Kurt McFall, Director
Royalty Management Division
New Mexico State Land Office
310 Old Santa Fe Trail
P.O. Box 1148
Santa Fe, NM 87504-1148

Larry Kehoe, Acting Director
Royalty Management Division
New Mexico State Land Office
310 Old Santa Fe Trail
P.O. Box 1148
Santa Fe, NM 87504-1148

State of New Mexico
Energy, Minerals and Natural Resources Department
New Mexico Oil Conservation Division
February 12, 2001
Page 3

Bob Jenks, Assistant Commissioner
Surface Resources Division
New Mexico State Land Office
310 Old Santa Fe Trail
P.O. Box 1148
Santa Fe, NM 87504-1148

Dennis Garcia, Director
Surface/Grazing/Right-of-Way Department
New Mexico State Land Office
310 Old Santa Fe Trail
P.O. Box 1148
Santa Fe, NM 87504-1148

Mike Miller, Division Chief
Minerals Management Service
Royalty Management Program
Bldg. 85, Room 212A
Denver Federal Center (80225)
P.O. Box 17110, T.A.
Denver, Colorado 80217-0110

Katy Galassini, Chief, Lease Maintenance Unit (Oil and Gas Section)
Bureau of Land Management
1474 Rodeo Road (87505)
P.O. Box 27115
Santa Fe, NM 87502-7115

Debbie Gibbs Tschudy, Manager
Minerals Revenue Management Division
Mineral Revenue Service
12600 W. Colfax Ave., Ste C-100
Lakewood, CO 80215

State of New Mexico
Energy, Minerals and Natural Resources Department
New Mexico Oil Conservation Division
February 12, 2001
Page 4

Eric Anaya
Board of Regents
University of New Mexico
c/o The President's Office
Scholes Hall, Room 160
Albuquerque, NM 87131-0001

David A. Archuleta, Esquire
Board of Regents
University of New Mexico
University Tower
1650 University Blvd. NE Suite 200
Albuquerque, NM 87102

Sandra K. Begay-Campbell
Board of Regents
University of New Mexico
1604 Adelita Dr. NE
Albuquerque, NM 87112

Jack L. Fortner, Esquire
Board of Regents
University of New Mexico
4000 E. 30th St. (87402)
P.O. Box 1960
Farmington, NM 87499

Judith C. Herrera, Esquire
Board of Regents
University of New Mexico
2200 Brothers Road (87505)
P.O. Box 5098
Santa Fe, NM 87502-5098

State of New Mexico
Energy, Minerals and Natural Resources Department
New Mexico Oil Conservation Division
February 12, 2001
Page 5

Col. USAF (Ret.) Richard Toliver
Board of Regents
University of New Mexico
12525 Royal Winslow Place, NE
Albuquerque, NM 87111

Larry D. Willard
Board of Regents
University of New Mexico
Regional President/CEO
Wells Fargo Bank, New Mexico, NA
200 Lomas Blvd., NW, 12th Floor (87102)
P.O. Box 1081
Albuquerque, NM 87103

Julie Weaks, Interim Vice-President for Business and Finance
University of New Mexico
Beneficiary of State of New Mexico Lease No. XO647-394
Scholes Hall, Room 109
Albuquerque, NM 87131-0001

Curtis Porter, Budget Director
University of New Mexico
Beneficiary of State of New Mexico Lease No. XO647-394
Scholes Hall, Room 122
Albuquerque, NM 87131

Michael Davis, Superintendent
New Mexico Department of Education
Beneficiary of State of New Mexico Lease No. XO647-394
Education Building
300 Don Gaspar
Santa Fe, NM 87501-2786

State of New Mexico
Energy, Minerals and Natural Resources Department
New Mexico Oil Conservation Division
February 12, 2001
Page 6

The Honorable Gary Johnson
Office of the Governor
State Capitol Building
Santa Fe, NM 87503

Representative Max Coll
Chairman of the House Appropriation Committee
New Mexico Legislature
State Capitol Building, Room 304
Santa Fe, NM 87503

Representative Max Coll
Chairman of the House Appropriation Committee
New Mexico Legislature
1018 Don Diego
Santa Fe, NM 87501

Representative James Roger Madalena
Chairman of the Energy and Natural Resources Committee
373 Buffalo Hill Road
Box 255
Jemez Pueblo, NM 87024

Representative Mimi Stewart
Vice Chairwoman of the Energy and Natural Resources Committee
District 21
New Mexico State Capitol Room 313A
Santa Fe, NM 87501

Harvey J. Padewer
Group President of Energy Services
Duke Energy Corporation
5400 Westheimer Ct. (77056-5310)
P.O. Box 1642
Houston, TX 77251-1642

State of New Mexico
Energy, Minerals and Natural Resources Department
New Mexico Oil Conservation Division
February 12, 2001
Page 7

J.W. (Jim) Mogg, Chairman and President
Duke Energy Field Services, L.L.C.
370 13th St., Suite 900
Denver, CO 80202-5493

Richard B. Priory, Chairman of the Board, President and CEO
Duke Energy Corporation
526 S. Church St. (28202)
P.O. Box 1006
Charlotte, NC 28201-1006

Robert P. Brace, Chief Financial Officer and Executive Vice President
Duke Energy Corporation
526 S. Church St. (28202)
P.O. Box 1006
Charlotte, NC 28201-1006

Richard W. Blackburn, Executive Vice President, General Counsel and Secretary
Duke Energy Corporation
526 S. Church St. (28202)
P.O. Box 1006
Charlotte, NC 28201-1006

Richard J. Osborne, Executive Vice President and Chief Risk Officer
Duke Energy Corporation
526 S. Church St. (28202)
P.O. Box 1006
Charlotte, NC 28201-1006

Jacquelyn Gates, Vice President Diversity and Ethics
Duke Energy Corporation
526 S. Church St. (28202)
P.O. Box 1006
Charlotte, NC 28201-1006

State of New Mexico
Energy, Minerals and Natural Resources Department
New Mexico Oil Conservation Division
February 12, 2001
Page 8

William A. Coley
Group President of Duke Power
Duke Energy Corporation
526 S. Church St. (28202)
P.O. Box 1006
Charlotte, NC 28201-1006

Duke Energy Field Services, L.L.C.
3300 N. A St., Bldg. 7 (79705-5421)
P.O. Box 50020
Midland, TX 79710-0020
Attn: Lewis C. (Chip) Short, Agent
Ken Lilley, Manager Gas Supply
Mike Fitzgibbons, Commercial Director
Ron Barcroft, Commercial VP
Larry Nash, Right-of-Way Manager

Kent Walz, Chief Editor
The Albuquerque Journal
7777 Jefferson Street, N.E.
Albuquerque, NM 87109

Billie Blair, Associate Editor
The New Mexican
222 East Marcy Street
Santa Fe, NM 87501

Jennie Buckner, Main Editor
The Charlotte Observer
600 S. Tryon Street
Charlotte, NC 28202-1842

Stephen Reid, President
Mobile Analytical Laboratories
P.O. Box 69210
Odessa, Texas 79769-0210

State of New Mexico
Energy, Minerals and Natural Resources Department
New Mexico Oil Conservation Division
February 12, 2001
Page 9

Rolland Perry
Laboratory Services, Inc.
4016 Fiesta Drive
Hobbs, NM 88240

Ron Willett, Engineer
Halliburton Energy Services
4000 N. Big Spring, Suite 200
Midland, TX 79705

James A. Davidson
214 W. Texas, Suite 710
Midland, TX 79701

Dale Lockett
1261 Old Hickory Road
Tyler, TX 75703

Gallegos Law Firm
460 St. Michaels Dr., Bldg. 300
Santa Fe, NM 87505
Attn: J.E. Gallegos
Michael J. Condon

DOYLE HARTMAN, Oil Operator (Dallas)

DOYLE HARTMAN, Oil Operator (Jal Field Office)
Harold Swain, Supervisor

DOYLE HARTMAN, Oil Operator (Midland)
Don Mashburn, Engineer
Steve Hartman, Engineer

Submit 3 copies
to Appropriate
District Office

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-103
Revised 1-1-89

DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

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

OIL CONSERVATION DIVISION

2040 Pacheco St.
Santa Fe, NM 87505

WELL API NO.

30-025-22317

Indicate Type of Lease

STATE ☒

FEE ☐

State Oil & Gas Lease No.

X0647-394 (formerly Lease No. 647)

Lease Name or Unit Agreement Name

State "BV"

Well No.

1

Pool name or Wildcat

South Empire Morrow

SUNDRY NOTICES AND REPORTS ON WELLS

(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A
DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT"
(FORM C-101) FOR SUCH PROPOSALS.)

Type of Well:

OIL
WELL ☐

GAS
WELL ☒

OTHER

Name of Operator

Doyle Hartman

Address of Operator

500 N. Main St., Midland, Texas 79701

Well Location

Unit Letter J : 1800 Feet From The South Line and 1980 Feet From The East Line

Section 25 Township 17S Range 28E NMPM Eddy County

Elevation (Show whether DF, RKB, RT, GR, etc.)

3700.5' RKB (3683.5' GL)

11

Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐

PLUG AND ABANDON ☐

TEMPORARILY ABANDON ☐

CHANGE PLANS ☐

PULL OR ALTER CASING ☐

OTHER: ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐

ALTERING CASING ☒

COMMENCE DRILLING OPNS. ☐

PLUG AND ANBANDONMENT ☐

CASING TEST AND CEMENT JOB ☐

OTHER: Run 5 1/2" tieback liner, add perfs, and stimulate ☒

Notice of threatened meter disconnection

12 Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

For details of completed operations, please refer to pages 2 of 4, 3 of 4 and 4 of 4 enclosed herewith.



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

SIGNATURE

Tricia Barnes

TITLE Production Analyst

DATE 02-12-01

TYPE OR PRINT NAME Tricia Barnes

TELEPHONE NO. 915-684-4011

(This space for State Use)

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

DETAILS OF COMPLETED OPERATIONS

Moved in and rigged up well service unit. Ran and set Model "F" profile nipple, at 10,645'. Unlatched "on-off" tool. Pulled and inspected 2 3/8" O.D., N-80 tubing.

Ran into hole with 2 3/8" O.D. tubing equipped with "on-off" tool. Hooked up air units. While running tubing, unloaded packer fluid from hole. Engaged "on-off" tool. Released Baker 4 1/2" Lok-Set packer. Pulled 4 1/2" Lok-Set packer and original 122.9' Vann Tool Company perforating - production assembly.

Rigged up Schlumberger. Logged lower part of wellbore, with DAS-CNL-GR-CCL log. Set RBP at 10,642' RKB. Loaded hole with 356 bbls of 2% KCl water. Finished logging well with DAS-CNL-GR-CCL log, from 7500' to 10,642. Logged well, from 6562' to 9600', and 0' to 3000', with USI-GR-CCL log.

Rigged up casing crew. Ran 5 1/2" O.D. tieback liner, configured as follows:

(1) 5" O.D., 18 lb/ft x 7 5/8" O.D. TIW Type LG	
Chevron Seal Nipple	3.00'
2 jts of 5 1/2" O.D., 17 lb/ft, N-80 csg.	85.56'
(1) 5 1/2" O.D., 17 lb/ft, N-80 orifice collar	1.21'
108 jts of 5 1/2" O.D., 17 lb/ft, N-80 csg.	4863.45'
<u>35 jts of 5 1/2" O.D., 17 lb/ft, P-110 csg.</u>	<u>1620.65'</u>
Total Tally	6573.87'

Stung into 5" O.D. TIW Type LG Receptacle, at 6562'. Rigged up Halliburton. Cemented 5 1/2" O.D. tieback liner, with 625 sx of API Class-C cement containing 0.5% Halad 322, at a cementing rate of 5 BPM. Circulated 128 sx of good-quality cement to pit. Plug down at 5:00 P.M., CST, November 22, 2000.

Installed Cameron 5 1/2" x 2 7/8" x 3 1/16" 10,000-psi working-pressure tubinghead. Tested tubinghead, and 5 1/2" O.D. tie-back liner, from 0' to 6391', to a wellhead pressure of 7500 psi. Pressure held okay.

Tied pump truck onto 10 3/4" O.D. x 7 5/8" O.D. casing annulus. Confirmed that 7 5/8" O.D. intermediate-string cement job, was tied into bottom of 10 3/4" O.D. surface casing, by attempting to pump down 10 3/4" x 7 5/8" annulus, at a pump-in pressure of 2000 psi. Could not pump down 10 3/4" O.D. x 7 5/8" O.D. casing annulus, at a pump-in pressure of 2000 psi.

Drilled out cement inside of 5 1/2" O.D. tieback liner. Pressure tested wellbore, from 0' to 10,642', to a wellhead pressure of 3500 psi. Ran into hole with 2 3/8" O.D., N-80 tubing and retrieving head. Hooked up air units. While running 2 3/8" O.D. tubing, unloaded 2% KCl water from wellbore. Unlatched and pulled RBP.

Ran 198.96' Schlumberger tubing-conveyed perforating gun. Perforated existing completion interval, as follows, with an additional 34 (0.45") deep-penetrating shots:

10,670 - 10,688'	(10 holes)
10,726 - 10,736'	(6 holes)
<u>10,748 - 10,782'</u>	<u>(18 holes)</u>
10,670 - 10,782'	(34 holes)

Rigged up Halliburton. Spotted acid across and above perms, from 10,670' to 10,782' (110 holes), by pumping 400 gal of 10% Clay Safe-5 acid containing 25% methonal, 5% Musol-A solvent, 0.2% SSO-21M surfactant, 0.2% Superflo III surfactant, 0.5% Cla-Sta XP clay stabilizer, 0.375 lb/gal Clafix clay control, and 0.05 lb/gal Ferchek - A iron control. Allowed acid to fall and equalize.

Raised and set packer, at 10,501'. Acidized well with an additional 6900 gal of 10% Clay Safe-5 acid solution, 16,587 gal of liquid CO₂, and 123 ball sealers, at an average treating rate of 5.6 BPM and average wellhead treating pressure of 2436 psi. Flushed with 15.16 bbls of 70 - quality foam consisting of 7% KCl water and liquid CO₂.

ISIP	=	500 psi
5 - min SIP	=	236 psi
10-min SIP	=	230 psi
15-min SIP	=	203 psi

Flow tested well.

Rigged up Halliburton. Performed CO₂ foam frac down casing - tubing annulus, with 247,784 gal of foam and 155,000 lbs of 20/40 and 16/20 high-strength proppant, at an average frac rate of 41.38 BPM (max rate = 47.70 BPM) and average wellhead casing pressure of 6632 psi (max pressure = 7206 psi).

ISIP	=	1820 psi
5-min SIP	=	1151 psi
10-min SIP	=	993 psi
15-min SIP	=	860 psi

During frac, average static wellhead tubing pressure = 1576 psi.

Lowered tubing. Tagged top of high-strength frac proppant, at 10,755'. Hooked up air units. Cleaned out frac proppant, to 10,851' RKB.

Tied well into sales line. Began testing well.

On 1-1-01, Duke Energy Field Services temporarily locked closed State "BV" No. 1 meter run, due to an alleged oxygen content of 34,000 ppm. From 1-02-01 until 1-16-01, produced well to atmosphere, to clean up well stream, and lower alleged high oxygen content.

Page 4 of 4
NMOCD Form C-103 dated 2-12-01
Doyle Hartman
State "BV" No. 1
J-25-17S-28E
API No. 30-025-22317

Subsequently, on 1-16-01, Duke measured well-stream oxygen content, at a substantially reduced level of 900 ppm. On 1-17-01, Duke unlocked State "BV" No. 1 meter run, and again allowed well to be produced into its Artesia gas gathering system.

On 1-24-01, contrary to non-discrimination provisions of 70-2-19, NMSA 1978, and NMOCD's No-Flare Rule, Duke issued a certified notice, that the State "BV" No. 1 well (**State of New Mexico Lease No. X0647-394**) would be disconnected (effective 3-1-01), from Duke's Artesia gathering system (that serves South Empire Morrow Pool), due to an alleged (but unsubstantiated) "increased oxygen content" in State "BV" No. 1 well stream.

On 2-6-01, Mobile Analytical Laboratories, of Odessa, Texas, measured oxygen content of State "BV" No. 1 well stream at 10 ppm (0.00001 gas fraction, or a daily oxygen rate of 0.005 MCFPD), substantiating that State "BV" No. 1 well is not (and cannot be) source of Duke's alleged high-oxygen problem, at Duke's Artesia plant. As of this date, and notwithstanding our just-completed \$825,000 workover, Duke has not withdrawn its threat to disconnect (remove) our State "BV" No. 1 gas meter, effective 3-1-01.

DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

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

OIL CONSERVATION DIVISION

2040 Pacheco St.
Santa Fe, NM 87505

WELL API NO.

30-015-22317

Indicate Type of Lease

STATE ☒

FEE ☐

State Oil & Gas Lease No.

647

Lease Name or Unit Agreement Name

State "BV"

Type of Well:

OIL
WELL ☐

GAS

WELL ☒

OTHER

Name of Operator

Doyle Hartman

Address of Operator

P. O. Box 10426, Midland, Texas 79702, (915) 684-4011

Well No.

1

Pool name or Wildcat

Empire South Morrow

Well Location

Unit Letter J : 1800 Feet From The South Line and 1980 Feet From The East Line

Section

25

Township

17S

Range

28E

NMPM

Eddy

County

Elevation (Show whether DF, RKB, RT, GR, etc.)

3700.5' RKB (3683.5' GL)

Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☒



PLUG AND ABANDON ☐



TEMPORARILY ABANDON ☐



CHANGE PLANS ☐



PULL OR ALTER CASING ☐



OTHER: Protect casing across uncemented waterflow zone ☒



SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐



ALTERING CASING ☐



COMMENCE DRILLING OPNS. ☐



PLUG AND ANBANDONMENT ☐



CASING TEST AND CEMENT JOB ☐



OTHER: ☐



Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

Move in well service unit. Set plug in Model "F" seating nipple. Unlatch Model "FL" on-off tool and pull out of hole with 2 3/8" O.D., 4.7 lb/ft, N-80 tubing. Drop frac sand to protect blanking plug and on-off tool. Trip into and out of hole with 4 1/2" casing scraper. Run into hole with Model "C" RBP. Set RBP at 9500'. Drop frac sand to protect RBP. Run into hole with the Model "C" packer and set at 6700'. Test integrity of 4 1/2" O.D. casing across poorly-bonded sections between 6800' and 8450'. If casing tests okay, run tapered mill and dress 5" tie-back sleeve at 6562'. Run 5" tie-back nipple and 6560' of 5 1/2" O.D., 17 lb/ft, N-80 casing to cover and protect presently uncemented section of 7 5/8" O.D. casing opposite waterflow interval at 1970'. Cement tie-back string from 0' - 6562'. In the event of waterflow while performing above described work, build and plastic line necessary holding pits (for containment of water) until waterflow has been properly isolated. After 5 1/2" O.D. tie-back liner has been landed and cemented into place, proceed with returning well to production.

The necessary work will be commenced, on or about October 22, 1999, promptly after election (to participate or assign interest) and payment of cost or assignment of interest has been made by each working interest owner.

* PERFORM AT TOC DN 7 5/8" AND CLAC TO SURFACE.

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

SIGNATURE

TITLE Engineer

DATE 10-05-99

TYPE OR PRINT NAME Steve Hartman

TELEPHONE NO. 915-684-4011

(This space for State Use)

SUPERVISOR, DISTRICT II

APPROVED BY

TITLE

DATE 11-22-99

CONDITIONS OF APPROVAL, IF ANY:

Phone
22-1206 Area 303

LYNES, INC.

Box 712
Sterling, Colo.

Owner Atlantic Richfield Co.
Box 1710
Address Hobbs, New Mexico 88240

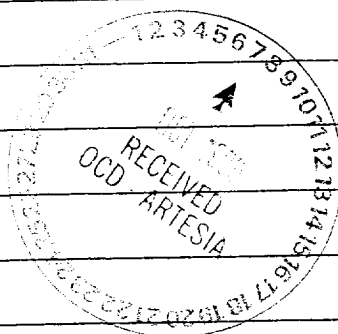
Lease and Well No.
Field
State B.V. Comm. #1
Empire Abo

Date 4-22-78
Ticket No. 12042

LOCATION
Purpose for ECP To shut off water flow.

Size and Type of ECP 7 5/8" 39# R.T.S. D-110 Steel
Casing Run Through: Size 10 3/4" Weight 40.5# Set At 880'
Open Hole Size: Drilled 9 1/2" Calipered --
Casing ECP Run On: Size 7 5/8" Weight 26# 29# Grade N-80
Maximum Pressure Allowed on Casing (psi) 3000
ECP Setting Depths: 1. 1750' 2. -- 3. --
Inflation Pressure: --
Temp. at Setting Depth: --
Back Pressure Valve Setting: 1600
Pressure at which Valves Opened: --
Type of Fluid ECP Set With Fresh water Wt./Gal. 8.34
Type of Fluid in Hole Brine water Wt./Gal. 8.5
Cement Program: No. of Sacks -- Cu. Ft. -- Wt./Gal. --
1st Stage 100 Class H -- --
2nd Stage 850 B.J. Lite -- --
3rd Stage 100 Class C -- --
Displacing Fluid Fresh water Wt./Gal. 8.34
Estimated Top of Cement 1700 Max. Diff. Pressure --
Casing Pressure just Prior to Bumping Top Plug --
Did Tool Function Properly? Yes

REMARKS:
Did not shut off water zone.

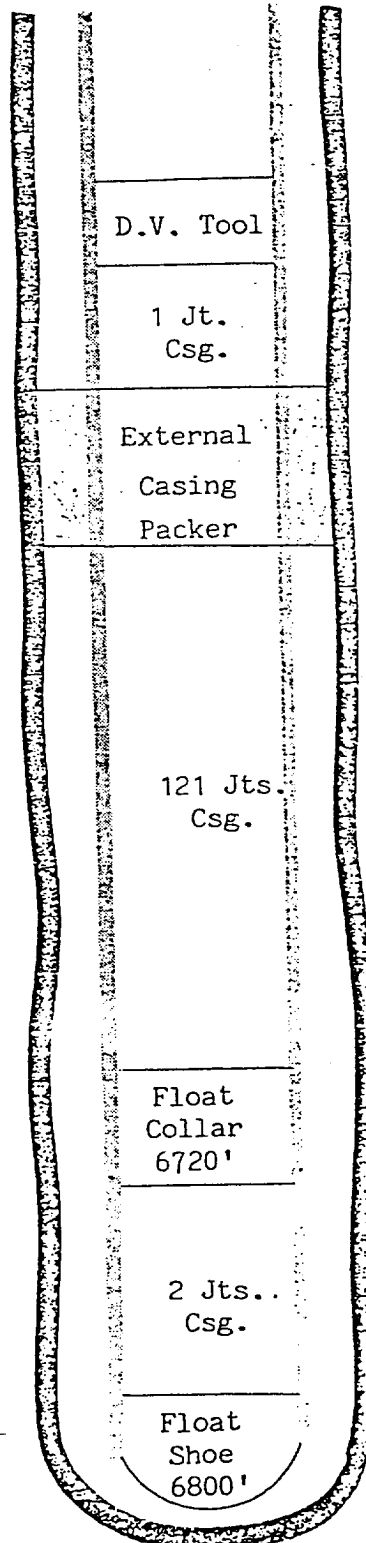


CEMENTING CO.: B.J. Hughes

Lynes Dist.: Hobbs, New Mexico

Lynes Representative: Dale Fain

Owners Representative: Butch Arning



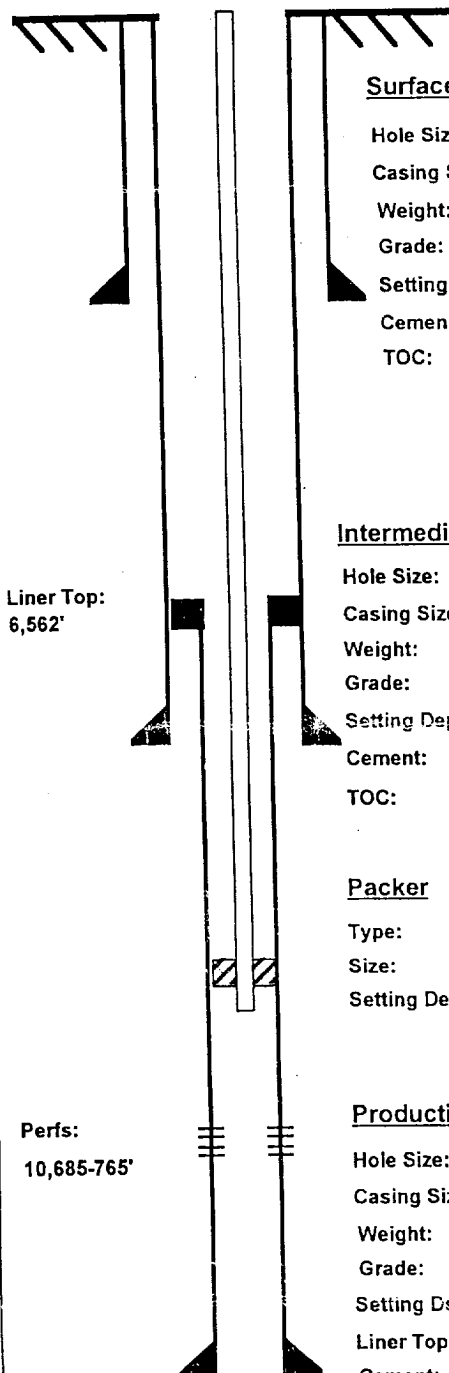
WELLBORE DIAGRAM

OPERATOR: DOYLE HARTMAN (formerly ARCO)
WELL: STATE "BV" No. 1
FIELD: EMPIRE SOUTH (Morrow)

PREP. DATE: 9-23-99

SPUD DATE: 4-6-78

COMP. DATE: 6-15-78



Surface String

Hole Size: 13-3/4"
Casing Size: 10-3/4"
Weight: 40.5#
Grade: K-55
Setting Depth: 880'
Cement: 550 sx
TOC: Circ

Intermediate String

Hole Size: 9-1/2"
Casing Size: 7-5/8"
Weight: 26.4#, 29.7#
Grade: K-55, N-80
Setting Depth: 6,805'
Cement: 1,450 sx
TOC: Circ

Packer

Type: Baker "LS"
Size: 4-1/2"
Setting Depth: 10,642' (VTC depth)

Production String

Hole Size: 6-3/4"
Casing Size: 4-1/2"
Weight: 11.6#
Grade: K-55, N-80
Setting Depth: 10,860'
Liner Top: 6,562'
Cement: 850 sx
TOC: 6,562'

Tubing String

Size: 2-3/8"
Weight: 4.7#
Grade: N-80
Setting Depth: 10,645'

Liner Top:
6,562'

Perfs:
10,685-765'

PBTD: 10,850'

TD: 10,860'

Location

UNIT: J
SECTION: 25
TWP: 17S
RNG: 28E
CO.: EDDY
STATE: NM
DF: 3,700'
GL: 3,682'

DRILLING HISTORY

Spudded well 4-6-78.

Encountered waterflow @ 1,970', 2 - 3 BPM.

Set 7-5/8" O.D. csg @ 6,805', w/Lynes ECP @ 1,747', DV Tool @ 1,697'. Cemented w/1,450 sx (2 stages). Stage 1 - 1,050 sx, plug did not bump, Lynes ECP did not hold waterflow. Stage 2 - 400 sx thixotropic (circ 35 sx).

Lost returns @ 9,175' - 9,208'.

Drilled 6-3/4" hole to 10,860' (loggers depth @ 10,850').

Set 4-1/2" liner at 6,562' - 10,860'. Cemented w/850 sx. Plug prematurely bumped while cementing liner. TOC inside of liner @ 9,929'. Ran a TIW 5" Type LG Receptacle on top of liner.

Drilled out cement to 6,562'. Tested 7-5/8" csg to 3,000 # for 1 hr., no leaks (6-6-78).

Drilled out cement to 10,850' drillers depth (loggers depth @ 10,844').

Ran GR-CBL from 6,400' - 10,844'. Poor bond 6,571' - 6,956', good bond 6,956' - 7,116', poor bond 7,116' - 7,266'.

Ran 2-3/8" tbq w/ Baker "FL" on - off tool w/ 1.81" I.D. profile ("F") nipple, Baker 4-1/2" Lok-Set PKR, 122.9' VTC Perforating - Production Assembly. Bottom of Baker 4-1/2" Lok-Set PKR @ 10,642.4' (VTC depth).

Perforated 4-1/2" production liner @ 10,685'-10,753', 10,760' - 10,765' (10,685' - 10,765' overall), w/1 SPF ((73) 0.5" holes).



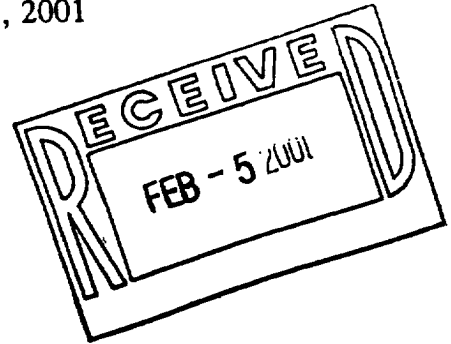


Duke Energy Field Services, L.L.C.
3300 North "A" Street, Building 7
Midland, Texas 79705-5421
P.O. Box 50020
Midland, Texas 79710-0020

January 24, 2001

VIA CERTIFIED MAIL; RETURN RECEIPT

Doyle Hartman
Oil Operator
3811 Turtle Creek Blvd., Suite 200
Dallas, Texas 75219



RE: State "BV" No. 1
S/2 Section 25 T-17S-R-28E
Eddy County, New Mexico
Gas Purchase Contract: LEE 0644-00* (dated August 25, 1986)
DEFS Meter No. 0681-076019-00

Gentlemen:

Duke Energy Field Services, LP ("DEFS") has been purchasing gas from the subject lease on a month to month basis, subsequent to your June 11, 1997 notice of termination of the subject contract. We have recently experienced problems meeting our residue gas quality specifications out of our Artesia Plant due to oxygen content, and have traced the high oxygen content in our gathering system to your lease. Due to increased oxygen content in the gas received by DEFS at this meter, DEFS can no longer accept deliveries of gas from this delivery point. Please accept this as our notification that, effective March 1, 2001, DEFS will disconnect the subject meter station and discontinue receipt of gas from this delivery point.

Yours truly,

Lewis C. Short, Agent
(915) 620-4056

LCS:ydg

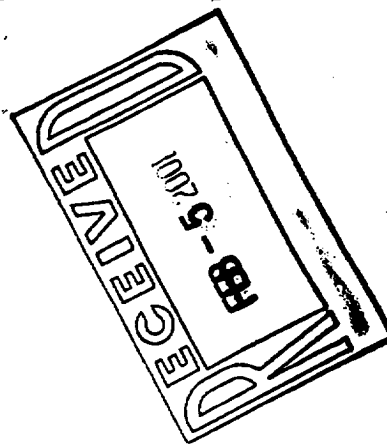
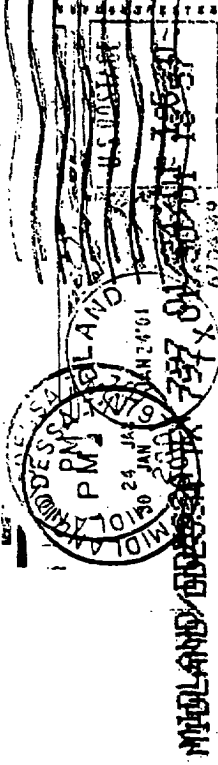


Duke Energy Field Services, L.L.C.
P.O. Box 50020
Midland, Texas 79710-0020

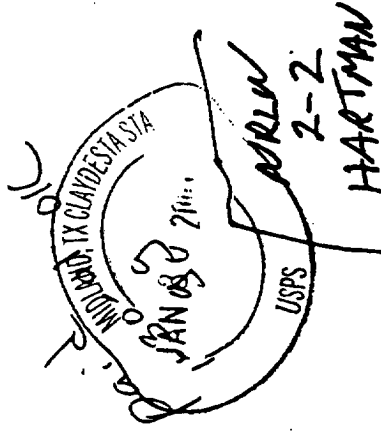
CERTIFIED

Z 137 381 981

MAIL



Doyle Hartman
Oil Operator
3811 Turtle Creek Blvd., Suite 200
Dallas, Texas 75219



75219-4537 11