GW - 19

SONAR TESTS

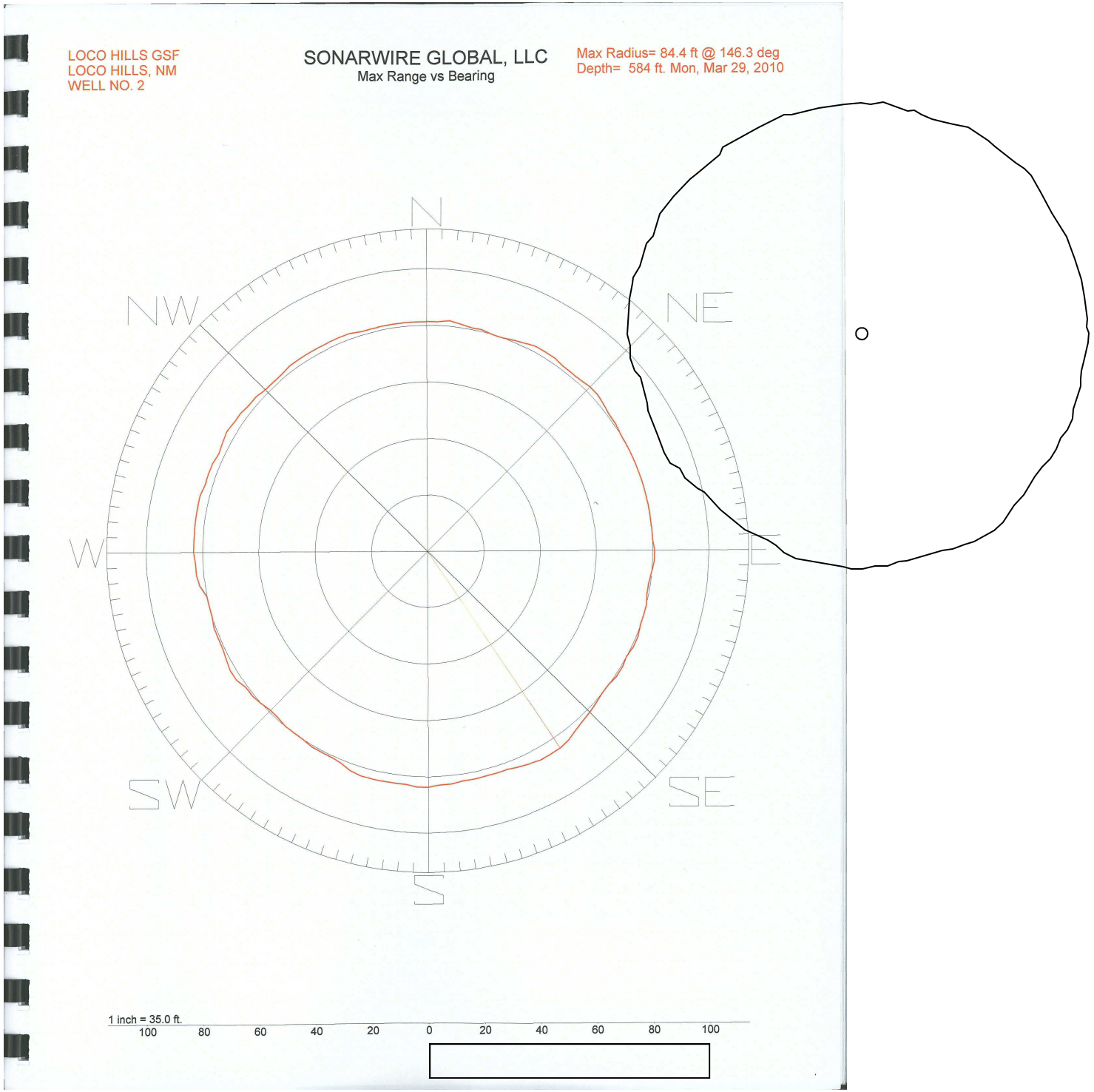
82
Diameter = 182 ft @ 581 ft
Shoe = 500 ft
D/H = 0.364
Volume = 129,353 bbls
(6/22/10)
Diameter = 147 ft @ 618 ft
Shoe = 525 ft
D/H = 0.282
Volume = 77,436 bbls
(6/3/09)
Leonard #1
Leonard #3
Leonard #2
194 ft
135 ft
water well
Diameter = 167 ft @ 584 ft
Shoe = 504 ft
D/H = 0.331
Volume = 135,864 bbls
(3/29/10)
294 ft
Data SIO, NOAA, U.S. Navy, NGA, GEBCO
© 2010 Google
Google
lat 32.818398° lon -104.068415°
Mar 28, 2010
Eye alt 1019 ft

Max Diameter = 167 ft @ 584 ft
Shoe depth = 504 ft

D/H = 0.331

TD = 623 ft

Volume = 135,864 bbls
(3/29/10)



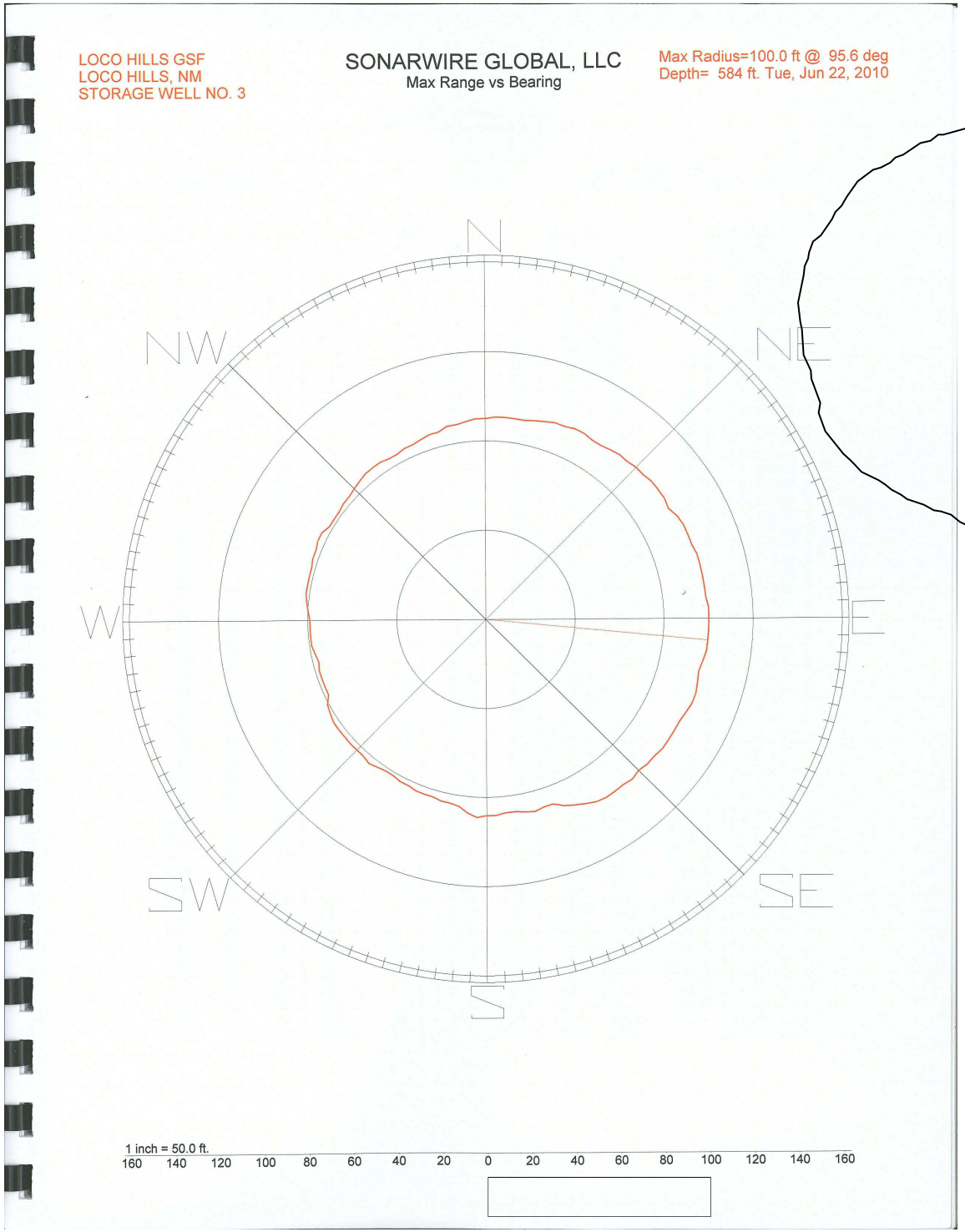
1.979” = 100 ft

Max Diameter = 182 ft @ 581 ft
Shoe depth = 500 ft

D/H = 0.364

TD = 608.5 ft

Volume = 129,353 bbls
(6/22/10)



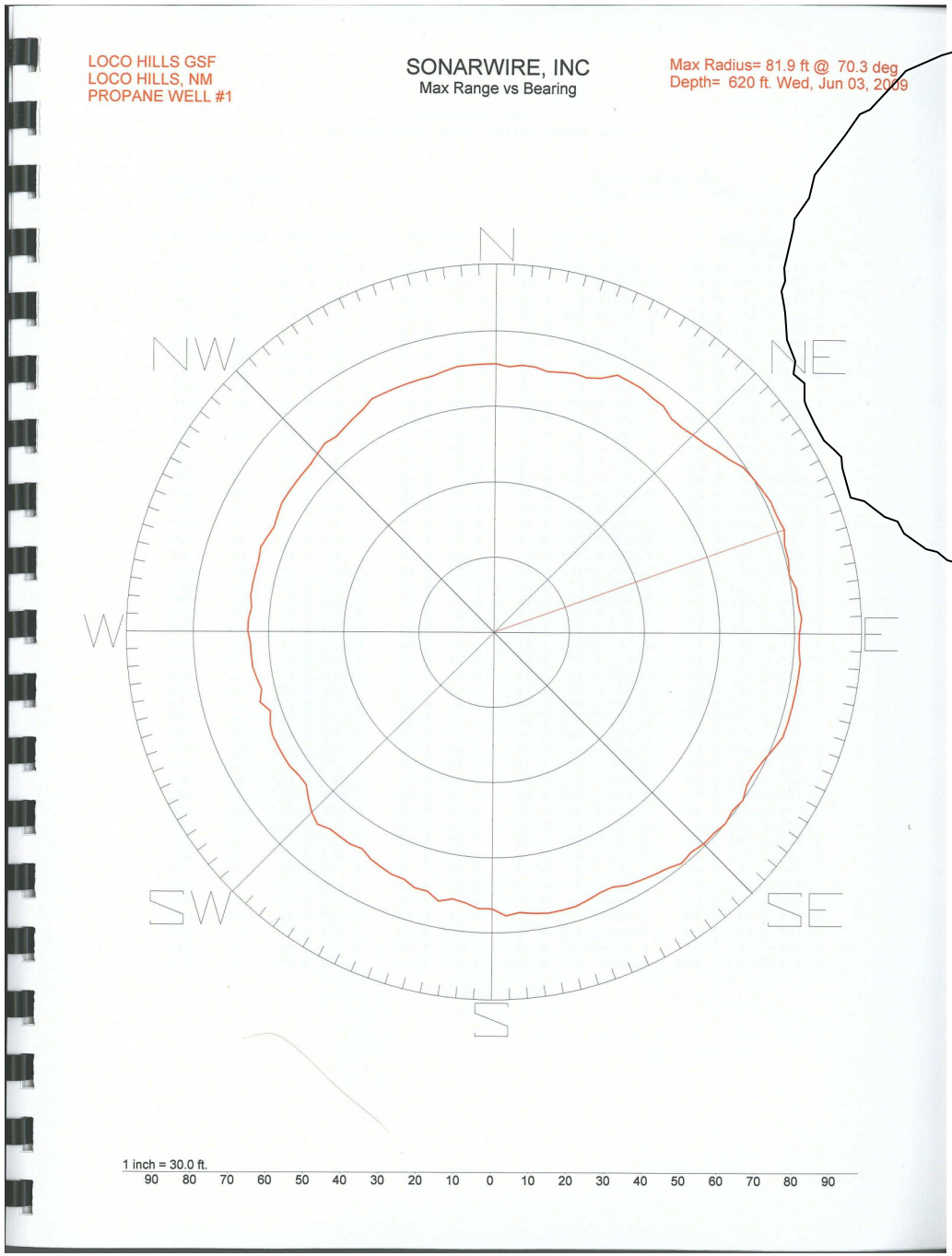
1.392” = 100 ft

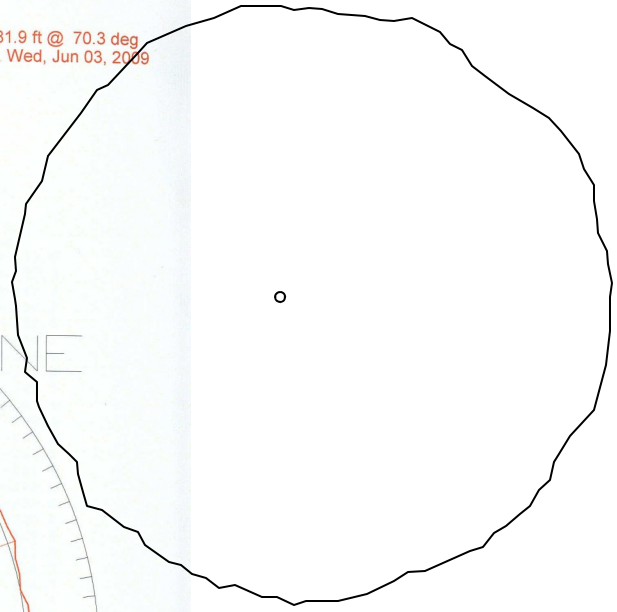
Max Diameter = 147 ft @ 618 ft
Shoe depth = 525 ft

D/H = 0.282

TD = 649 ft

Volume = 77,436 bbls
(6/3/09)

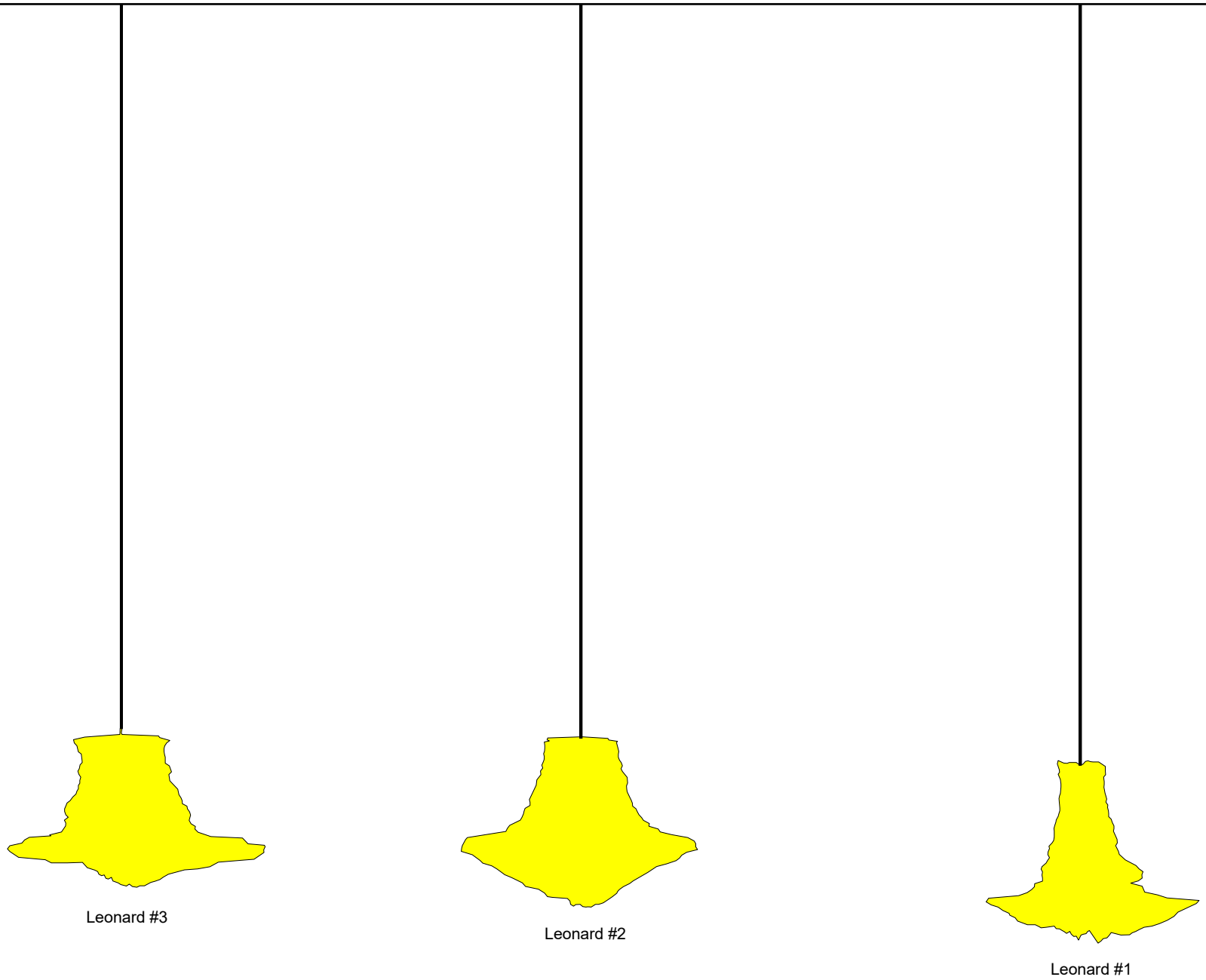




2.078” = 100 ft

WEST

EAST

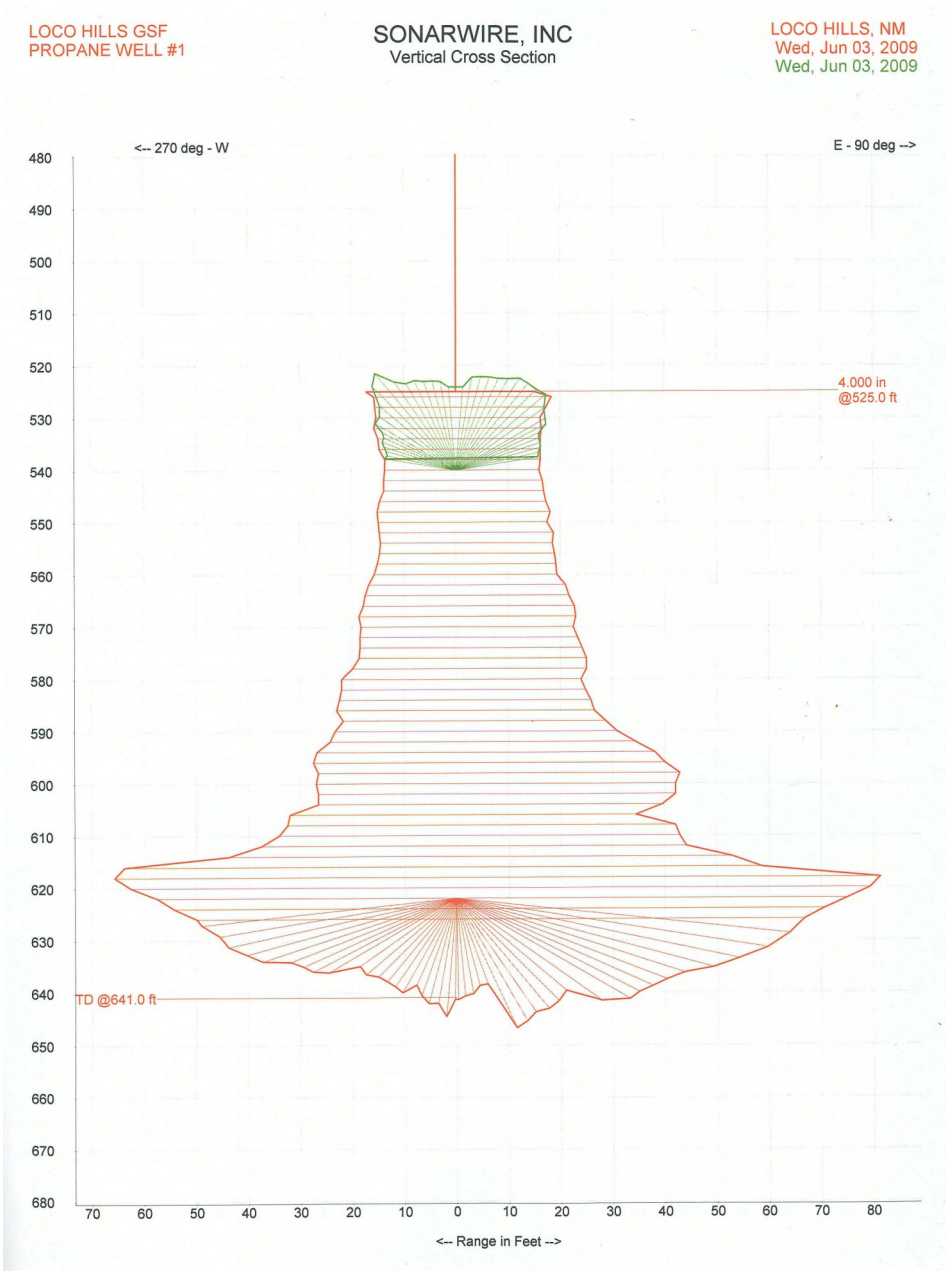


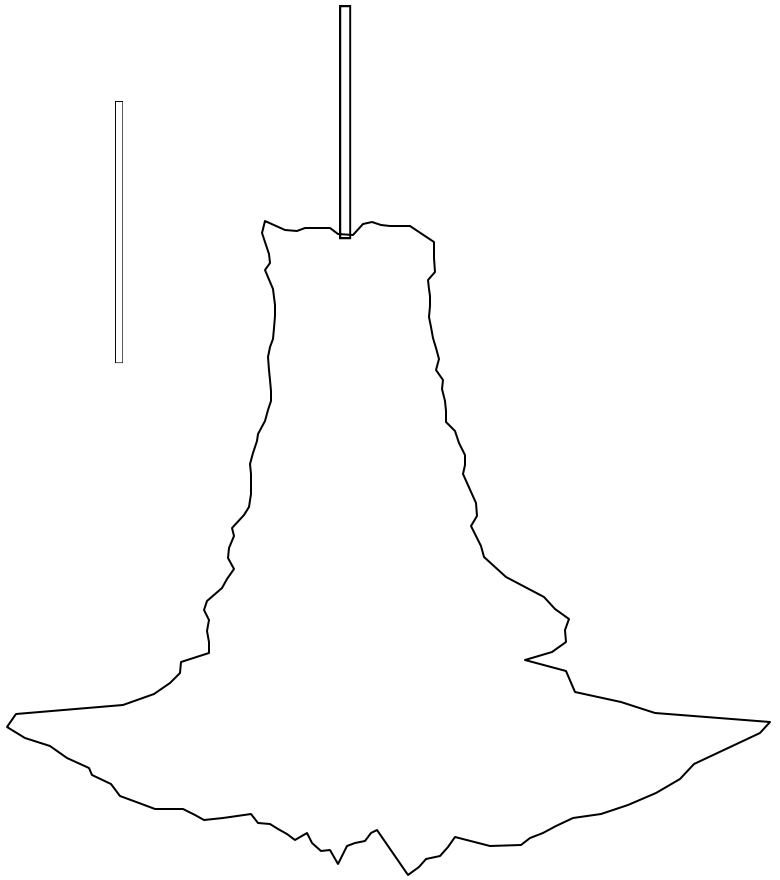
1 inch = 100 feet

LOCO HILLS GSF
PROPANE WELL #1

SONARWIRE, INC
Vertical Cross Section

LOCO HILLS, NM
Wed, Jun 03, 2009
Wed, Jun 03, 2009



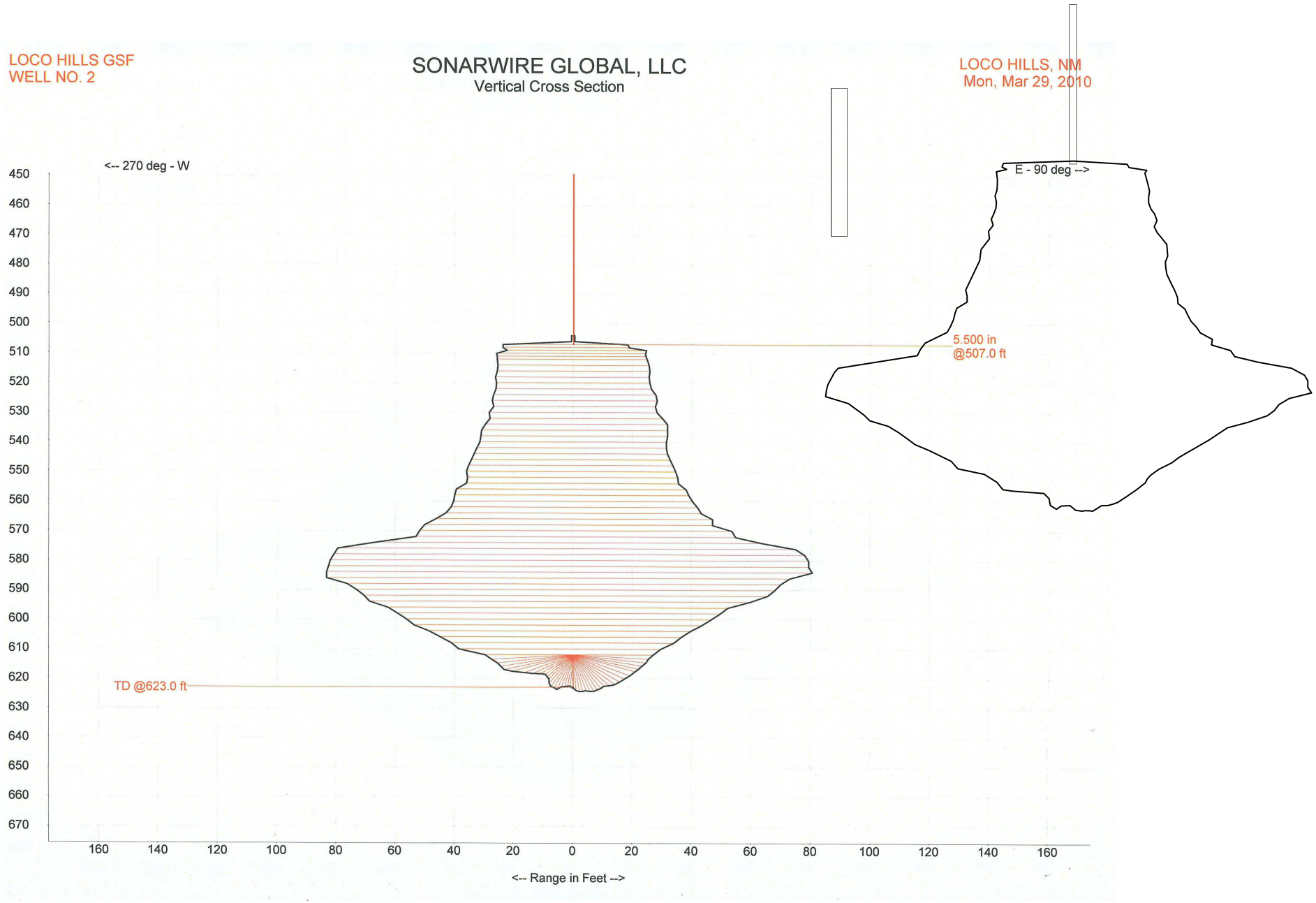


LOCO HILLS GSF
WELL NO. 2

SONARWIRE GLOBAL, LLC

Vertical Cross Section

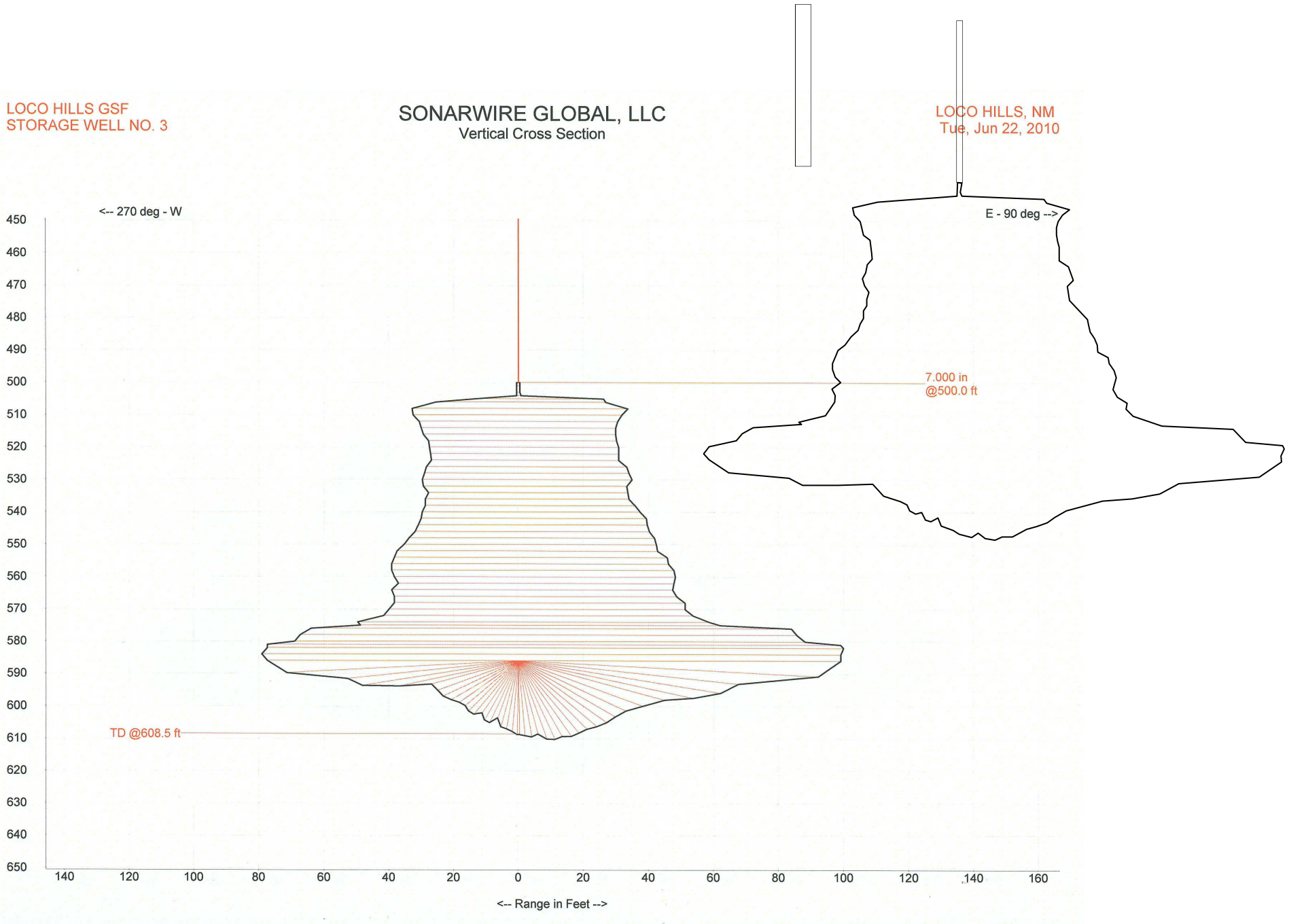
LOCO HILLS, NM
Mon, Mar 29, 2010



LOCO HILLS GSF
STORAGE WELL NO. 3

SONARWIRE GLOBAL, LLC
Vertical Cross Section

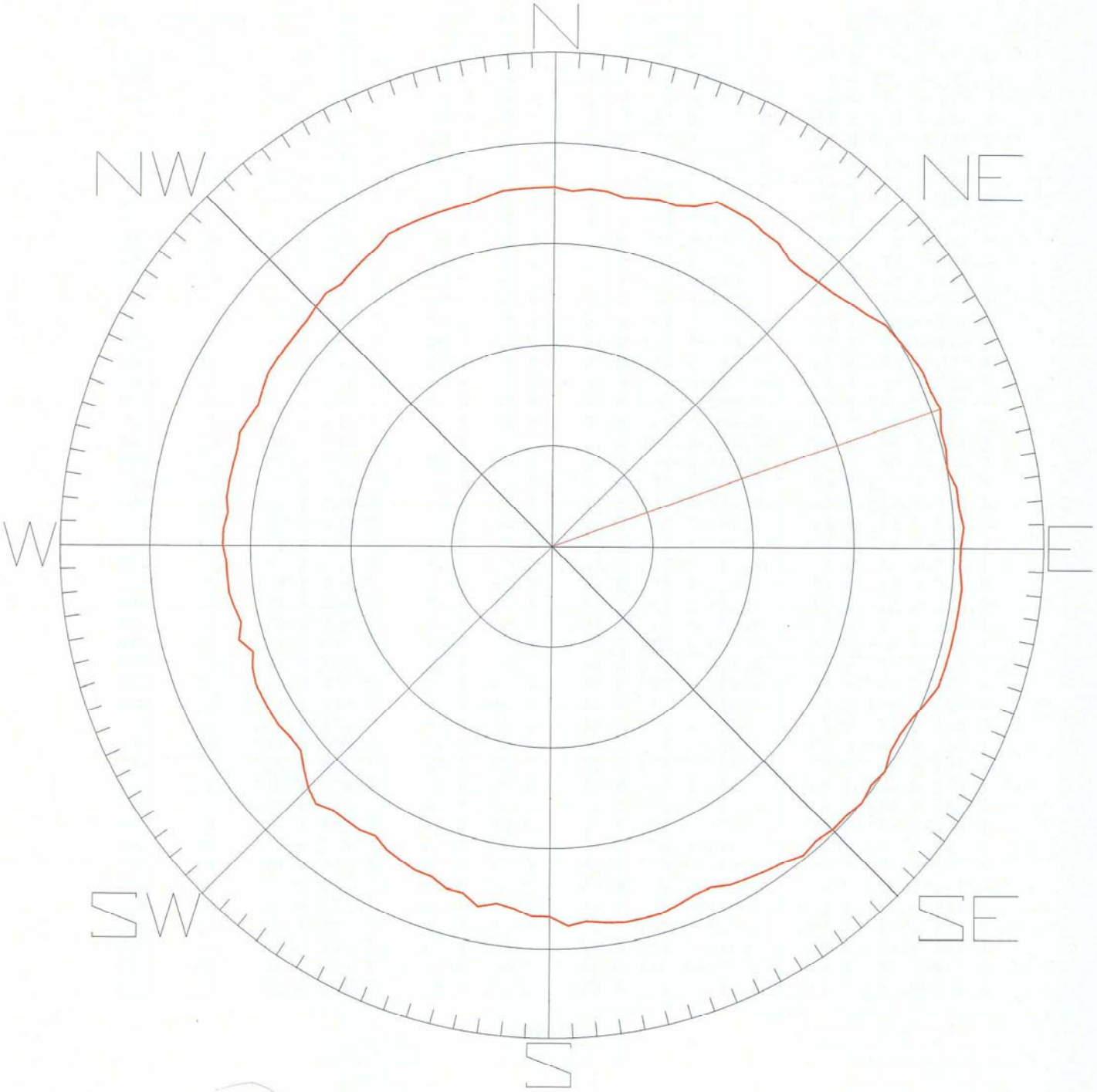
LOCO HILLS, NM
Tue, Jun 22, 2010



LOCO HILLS, NM
PROPANE WELL #1

Max Range vs Bearing

Depth= 620 ft. Wed, Jun 03, 2009



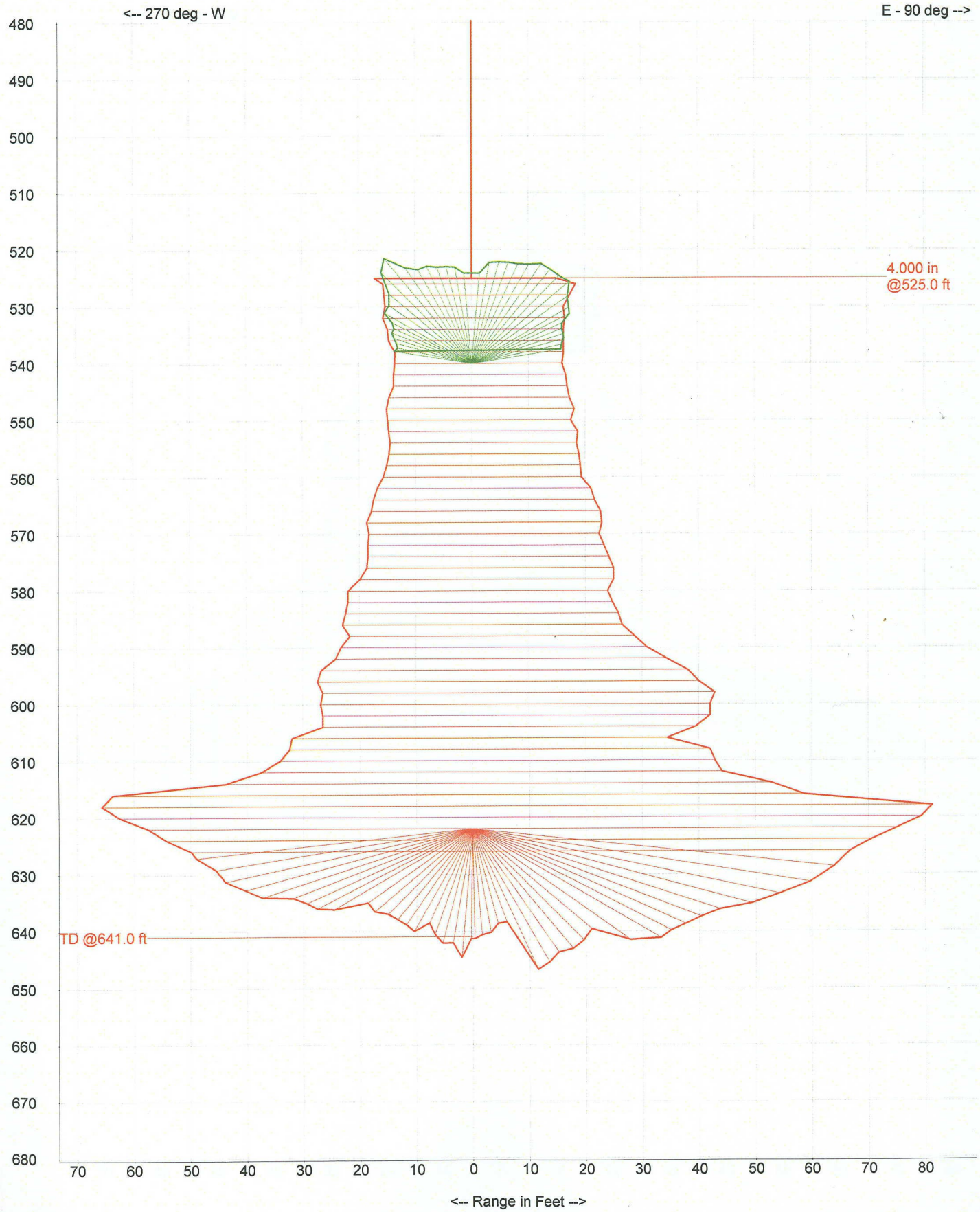
1 inch = 30.0 ft.

90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90

PROPANE WELL #1

SONARWIRE, INC
Vertical Cross Section

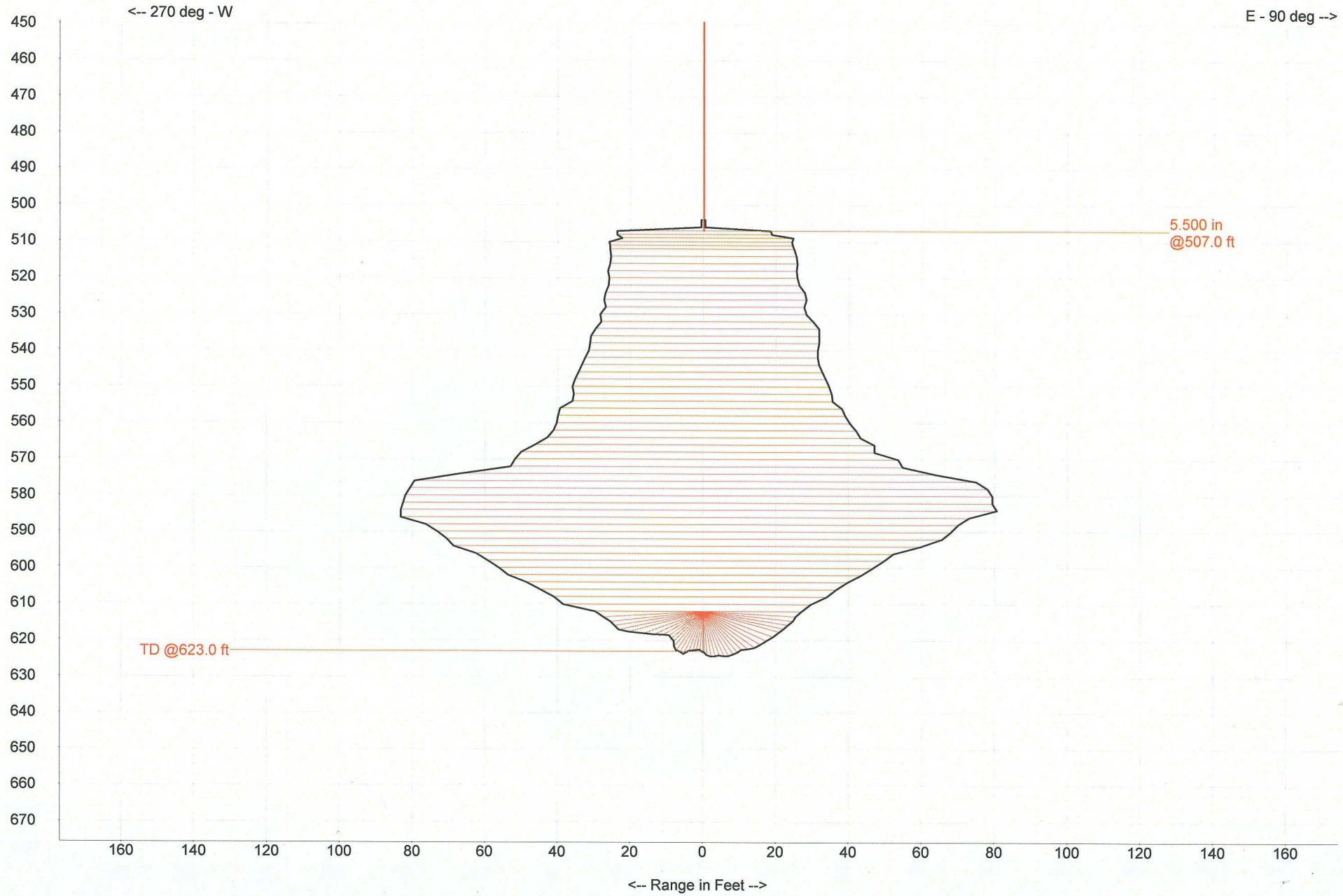
Wed, Jun 03, 2009
Wed, Jun 03, 2009



LOCO HILLS GSF
WELL NO. 2

SONARWIRE GLOBAL, LLC
Vertical Cross Section

LOCO HILLS, NM
Mon, Mar 29, 2010

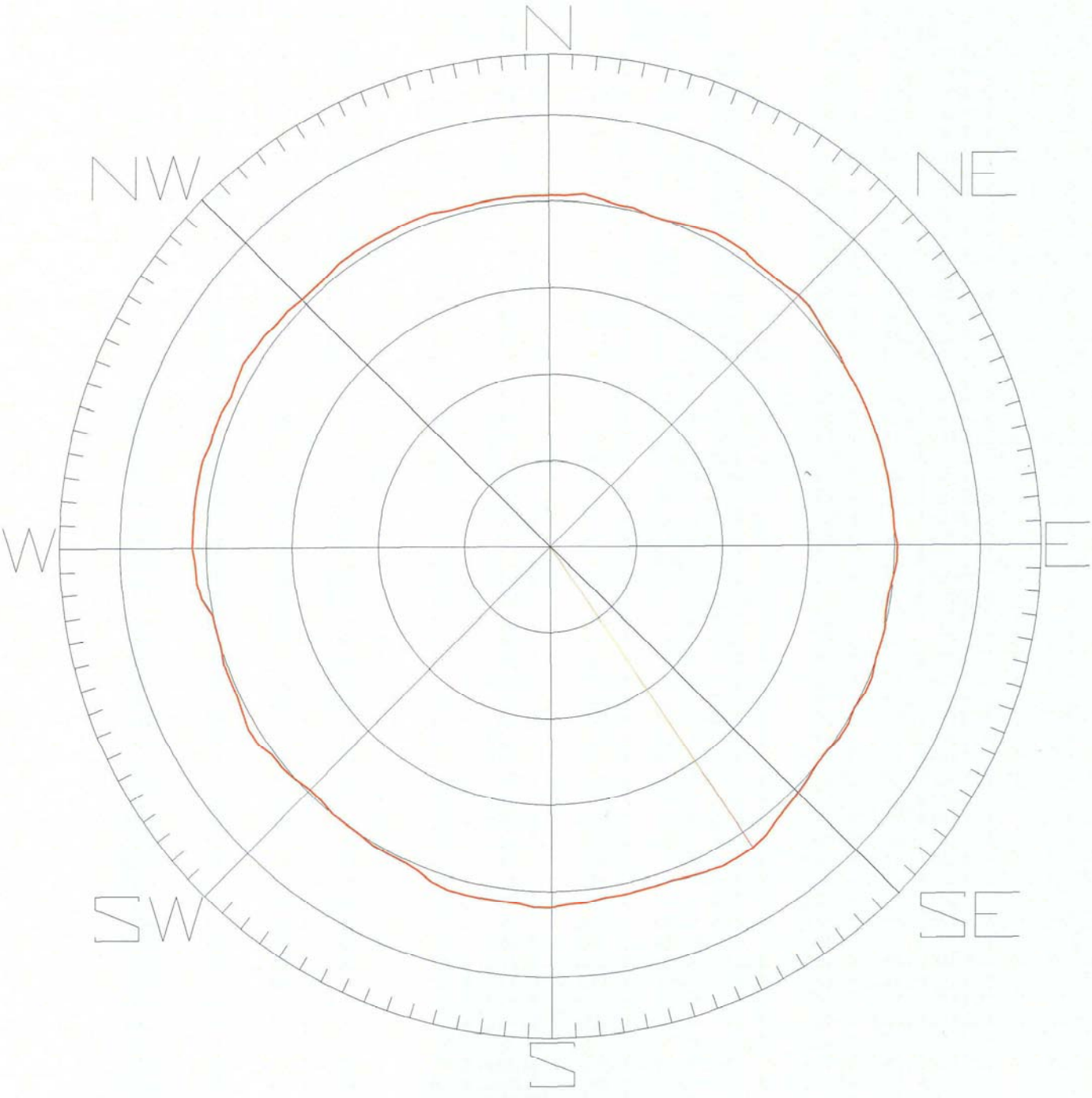


LOCO HILLS GSF
LOCO HILLS, NM
WELL NO. 2

SONARWIRE GLOBAL, LLC

Max Range vs Bearing

Max Radius= 84.4 ft @ 146.3 deg
Depth= 584 ft. Mon, Mar 29, 2010



1 inch = 35.0 ft.

100 80 60 40 20 0 20 40 60 80 100

SUBJECT: STORAGE LIQUEFIED PETROLEUM GAS NOVEMBER 10, 1953

APPLICATION OF SACRA BROTHERS COMPANY FOR PERMISSION TO DRILL A WELL FOR THE STORAGE OF LIQUEFIED PETROLEUM GAS IN NW/4 SW/4 SECTION 22, TOWNSHIP 17 SOUTH, RANGE 29 EAST, NMPM, EDDY COUNTY, NEW MEXICO.

ORDER NO. LPG-5

ADMINISTRATIVE ORDER
OF THE OIL CONSERVATION COMMISSION

Under the provisions of Order No. R-313 in Case 523, and Rule 705 of the Commission's Rules and Regulations established thereunder, Sacra Brothers Company made application to the Commission on October 29, 1953, for authority to drill an LPG-storage well in NW/4 SW/4 Section 22, Township 17 South, Range 29 East, NMPM, Eddy County, New Mexico, and

The Secretary - Director Finds:

(1) That application has been duly filed in proper form under the provisions of Rule 705;

(2) That satisfactory information has been provided that all operators of offset acreage within a one-half mile radius of the proposed well have been notified of the operators intention; and

(3) That no objections have been received within the ten-day waiting period as prescribed by said rule.

IT IS THEREFORE ORDERED:

That the applicant herein, Sacra Brothers Company, be and it hereby is authorized to complete its projected LPG storage well in NW/4 SW/4 Section 22, Township 17 South, Range 29 East, NMPM, Eddy County, New Mexico, as a storage well for liquefied petroleum gas;

That the effectiveness of this order is conditional upon the stipulation that the well be drilled to an approximate depth of 675', as set forth in operator's application, at which point a storage cavity will be washed out in the salt section for the specified use; further, that the Commission's approval be secured through Form C-101, Notice of Intention to Drill, and subsequent actual inspections of the casing operations on said well.

No part of this order shall be construed as relieving Sacra Brothers Company from liability to any person, firm or corporation as a result of the drilling or operation of such storage project.

By authority granted under provisions of Rule 705 of the Commission's Rules and Regulations, this order is issued and approved this 10th day of November, 1953.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

R. R. Spurrier, Secretary-Director

SEAL

(Form C-101)
(Revised 7/1/52)

NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico

NOTICE OF INTENTION TO DRILL OR RECOMPLETE

Notice must be given to the District Office of the Oil Conservation Commission and approval obtained before drilling or recompletion begins. If changes in the proposed plan are considered advisable, a copy of this notice showing such changes will be returned to the sender. Submit this notice in QUINTUPLICATE. One copy will be returned following approval. See additional instructions in Rules and Regulations of the Commission.

Artesia N. M. (Place) October 5, 1953 (Date)

OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO

Gentlemen:

You are hereby notified that it is our intention to commence the (Drilling) (Recompletion) of a well to be known as

Sacra Brothers Co. (Company or Operator)

State (Lease), Well No. 3, in (Unit). The well is

located 560 feet from the West line and 1975 feet from the South line of Section 22, T. 17, R. 29, NMPM.

(GIVE LOCATION FROM SECTION LINE) Pool, Eddy County

D	C	B	A
E	F	G	H
L	K	J	I
M	N	O	P

If State Land the Oil and Gas Lease is No.

If patented land the owner is

Address

We propose to drill well with drilling equipment as follows: Cable tools.

The status of plugging bond is

Drilling Contractor A. F. Smith

We intend to complete this well in the Salt formation at an approximate depth of 700 feet.

CASING PROGRAM

We propose to use the following strings of Casing and to cement them as indicated:

Size of Hole	Size of Casing	Weight per Foot	New or Second Hand	Depth	Sacks Cement
8 5/8	7" OD	20#	New	500'	75

If changes in the above plans become advisable we will notify you immediately.

ADDITIONAL INFORMATION (If recompletion give full details of proposed plan of work.)

This well to be drilled for the purpose of creating underground storage in the salt section for LPG.

Approved NOV 10 1953, 19
Except as follows:

By OCC Order No. LPG-5

OIL CONSERVATION COMMISSION

By L. A. Hanson

Title OIL AND GAS INSPECTOR

Sincerely yours,

Sacra Brothers Co. (Company or Operator)

By B. N. Muncy Jr.

Position Manager

Send Communications regarding well to

Name B. N. Muncy, Jr.

Address 402 North First-Artesia, N. M.

OIL CONSERVATION COMMISSION
ARTESIA, DISTRICT OFFICE

No. Copies Received 6

Operator	1
Santa Fe	1
Proration Office	
State Land Office	1
U. S. G. S.	2
Transporter	
File	1

(Revised ...)

NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico

RECEIVED
MAY 7 1955
Oil Cons.
ARTESIA

MISCELLANEOUS REPORTS ON WELLS

Submit this report in TRIPLICATE to the District Office, Oil Conservation Commission, within 10 days after the work specified is completed. It should be signed and filed as a report on Beginning Drilling Operations, Results of test of casing shut-off, result of plugging of well, result of well repair, and other important operations, even though the work was witnessed by an agent of the Commission. See additional instructions in the Rules and Regulations of the Commission.

Indicate Nature of Report by Checking Below

REPORT ON BEGINNING DRILLING OPERATIONS		REPORT ON RESULT OF TEST OF CASING SHUT-OFF		REPORT ON REPAIRING WELL	
REPORT ON RESULT OF PLUGGING WELL		REPORT ON RECOMPLETION OPERATION		REPORT ON (Other)	x

May 6, 1955 (Date) Artesia, N. M. (Place)

Following is a report on the work done and the results obtained under the heading noted above at the

Sacra Brothers Co. (Company or Operator) Leonard State (Lease)

A. F. Smith (Contractor), Well No. 3 in the NW ¼ SW ¼ of Sec. 22,

T. 17, R. 29, NMPM., Pool, Eddy County.

The Dates of this work were as folows: October 10, 1953 November 15, 1953

Notice of intention to do the work (was) (~~was not~~) submitted on Form C-102 on October 5 (Cross out incorrect words), 19 53,

and approval of the proposed plan (was) (~~was not~~) obtained.

DETAILED ACCOUNT OF WORK DONE AND RESULTS OBTAINED

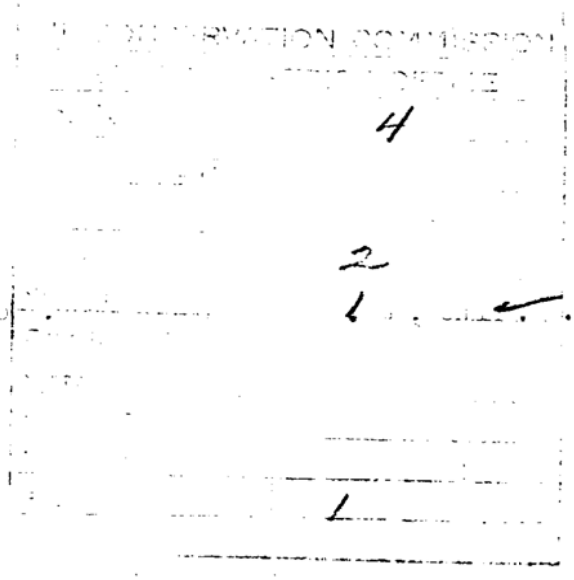
Drilled 8 5/8 hole into Cowden anhydrite and set & 7" OD casing at 505' 7" and circulated cement to top. Drilled to bottom of salt section at 675 ' , ran 3" tubing.

Witnessed by B. N. Muncy, Jr. (Name) Sacra Bros. Co. (Company) Manager (Title)

Approved:
OIL CONSERVATION COMMISSION
L. C. Hanson (Name)
... (Title)
MAY 11 1955 (Date)

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

Name B. N. Muncy Jr.
Position Pet. mgr.
Representing Sacra Brothers Co.
Address P.O. Box 1194 Roswell N.M.


4
2
1
1

RECEIVED
OCT 16 1953
Oil Cons. Comm.
Artesia Office

Company Sacra Bros.

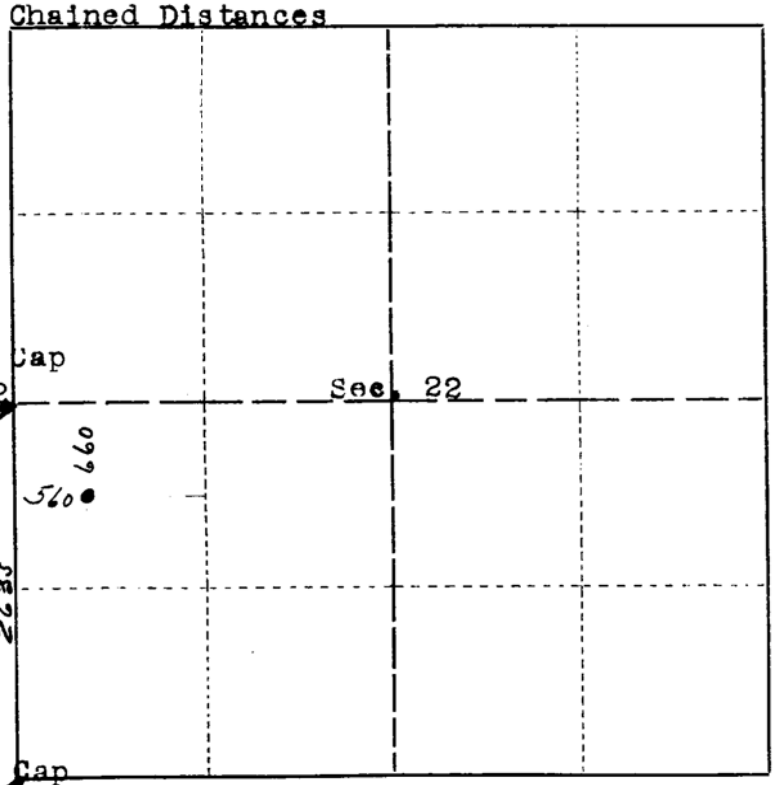
Lease Leonard-State Well No. 3

Sec. 22 T. 17 S., R. 29 E., N.M.P.M.

Location 560 ft. fr WL & 1975 ft. fr SL

County Eddy, New Mexico

Chained Distances



Scale 4" = 1 mile.

This is to certify that the above plat was prepared from field notes of actual surveys made by me or under my supervision and that the same are true and correct to the best of my knowledge and belief.

John A. Mathis Jr.

Registered Professional Engineer and Land Surveyor.

Seal:

Artesia, New Mexico

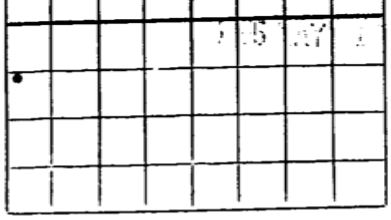
Surveyed October 8, 1953

17532 Advocate Print

WELL RECORD

Oil Cons. Comm.
ARTESIA OFFICE

Mail to District Office, Oil Conservation Commission, to which Form C-101 was sent not later than twenty days after completion of well. Follow instructions in Rules and Regulations of the Commission. Submit in QUINTUPLICATE.



AREA 640 ACRES
LOCATE WELL CORRECTLY

Sacra Broth ers Co. (Company or Operator) Leonard State (Lease)

Well No. 3, in NW ¼ of SW ¼, of Sec. 22, T. 17, R. 29, NMPM.

Pool, Eddy County.

Well is 560 feet from West line and 1975 feet from South line of Section 22. If State Land the Oil and Gas Lease No. is

Drilling Commenced October 10, 1953, 19.... Drilling was Completed October 31, 19 53

Name of Drilling Contractor A. F. Smith

Address Artesia, N. M.

Elevation above sea level at Top of Tubing Head 3549.60 The information given is to be kept confidential until ....., 19.....

OIL SANDS OR ZONES

No. 1, from ..... to ..... No. 4, from ..... to .....

No. 2, from ..... to ..... No. 5, from ..... to .....

No. 3, from ..... to ..... No. 6, from ..... to .....

IMPORTANT WATER SANDS

Include data on rate of water inflow and elevation to which water rose in hole.

No. 1, from 100 to 105 feet.

No. 2, from 115 to 120 feet.

No. 3, from ..... to ..... feet.

No. 4, from ..... to ..... feet.

CASING RECORD

SIZE	WEIGHT PER FOOT	NEW OR USED	AMOUNT	KIND OF SHOE	CUT AND PULLED FROM	PERFORATIONS	PURPOSE
8 5/8 od	27	New	130' 7"	none		none	water
7 OD	20	New	505' 7"	Texas Pat.		none	

MUDDING AND CEMENTING RECORD

SIZE OF HOLE	SIZE OF CASING	WHERE SET	NO. SACKS OF CEMENT	METHOD USED	MUD GRAVITY	AMOUNT OF MUD USED
8 5/8	7	505' 7"	398	Halliburton		

RECORD OF PRODUCTION AND STIMULATION

(Record the Process used, No. of Qts. or Gals. used, interval treated or shot.)

Cable tools were used from..... to .....

PRODUCTION

Put to Producing....., 19.....

OIL WELL: The production during the first 24 hours was.....barrels of liquid of which.....% was was oil; .....% was emulsion; .....% water; and.....% was sediment. A.P.I. Gravity.....

GAS WELL: The production during the first 24 hours was.....M.C.F. plus.....barrels of liquid Hydrocarbon. Shut in Pressure.....lbs.

Length of Time Shut in.....

PLEASE INDICATE BELOW FORMATION TOPS (IN CONFORMANCE WITH GEOGRAPHICAL SECTION OF STATE):

Southeastern New Mexico		Northwestern New Mexico	
T. Anhy.....	T. Devonian.....	T. Ojo Alamo.....	
T. Salt.....	T. Silurian.....	T. Kirtland-Fruitland.....	
B. Salt.....	T. Montoya.....	T. Farmington.....	
T. Yates.....	T. Simpson.....	T. Pictured Cliffs.....	
T. 7 Rivers.....	T. McKee.....	T. Menefee.....	
T. Queen.....	T. Ellenburger.....	T. Point Lookout.....	
T. Grayburg.....	T. Gr. Wash.....	T. Mancos.....	
T. San Andres.....	T. Granite.....	T. Dakota.....	
T. Glorieta.....	T.	T. Morrison.....	
T. Drinkard.....	T.	T. Penn.....	
T. Tubbs.....	T.	T.	
T. Abo.....	T.	T.	
T. Penn.....	T.	T.	
T. Miss.....	T.	T.	

FORMATION RECORD

From	To	Thickness in Feet	Formation
0	5	5	Sand
5	60	55	Red Beds
60	80	20	Anhydrite
80	115	35	Anhydrite
115	120	5	Blue Clay
120	135	15	Anhydrite
135	250	115	Red Bed
250	260	10	Anhydrite
260	265	5	Red Bed
265	275	10	Salt
275	280	5	Anhydrite
280	445	165	Salt
445	452	7	Anhydrite
452	497	45	Salt
497	525	28	Anhydrite
525	675	150	Salt
675	677	2	Polyhalite
677	680	3	Anhydrite

From	To	Thickness in Feet	Formation

OIL CONSERVATION COMMISSION
DISTRICT OFFICE
6
1
State Land Office 1
U. S. G. S. 2
Contractor
File 1
B. of Mines 1

ATTACH SEPARATE SHEET IF ADDITIONAL SPACE IS NEEDED

I hereby swear or affirm that the information given herewith is a complete and correct record of the well and all work done on it so far as can be determined from available records.

(2)

NEW MEXICO OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO

RECEIVED
DEC 8 1959
O. C. C.
ARTESIA, OFFICE

Form C-116
Revised 7/1/55

(File the original and 4 copies with the appropriate district office)

CERTIFICATE OF COMPLIANCE AND AUTHORIZATION TO TRANSPORT OIL AND NATURAL GAS

Company or Operator Arrow Gas Company Lease # BL - 96

Well No. [redacted]-3 Storage for LPG Unit Letter 22 S 17S T 29 ER Pool _____

County Eddy Kind of Lease (State, Fed. or Patented) State

If well produces oil or condensate, give location of tanks: Unit ____ S ____ T ____ R ____

Authorized Transporter of Oil or Condensate _____

Address Box 1294, Roswell, N. M.
(Give address to which approved copy of this form is to be sent)

Authorized Transporter of Gas _____

Address _____ Date Connected _____
(Give address to which approved copy of this form is to be sent)

If Gas is not being sold, give reasons and also explain its present disposition:
Under Ground Storage for Liquefied Petroleum Gas.

Reasons for Filing: (Please check proper box) New Well ( )

Change in Transporter of (Check One): Oil ( ) Dry Gas ( ) C'head ( ) Condensate ( )

Change in Ownership (XX) Other ( )
(Give explanation below)

Remarks:
Change in ownership from Sacra Brothers Co. to Arrow Gas Company
$10,000 Blanket Plugging Bond # 17196

The undersigned certifies that the Rules and Regulations of the Oil Conservation Commission have been complied with.

Executed this the 7th day of December 1959

By T. J. Murray T. J. Murray

Title Secretary

Company Arrow Gas Company

Address Box 1294, Roswell, N. M.

Approved DEC 8 1959 19___

OIL CONSERVATION COMMISSION

By M L Armstrong
OIL AND GAS INSPECTOR

Title _____

MAR 29, 2002

WELLS INVOLVED IN NAME CHANGE
FINAL LIST WITH C104B

OPERATOR: 186724 COLUMBIA PROPANE LP

OCD DISTRICT: ARTESIA

OPERATOR INITIALS RMC

PROP-ERTY	WELL NAME	ULSTR	OCD UNIT LTR	API
29495	LEONARD #001	L-22-17S-29E	L	30-015-06192
	LEONARD #002	L-22-17S-29E	L	30-015-06193
	LEONARD #003	L-22-17S-29E	L	30-015-06194

1

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

Form C-104B
March 19, 2001

Submit 1 copy of the final affected wells list along with 1 copy of this form per number of wells on that list to appropriate District Office

Change of Operator Name

OGRID: 186724
Effective Date: August 21, 2001

Previous Operator Name and Information:

Name: Columbia Propane, L.P.
Address: 10710 Midlothian Turnpike
Address: Suite 200
City, State, Zip: Richmond, VA 23235

New Operator Name and Information:

New Name: AmeriGas Eagle Propane, L.P.
Address: 460 North Gulph Road
Address:
City, State, Zip: King of Prussia, PA 19406

I hereby certify that* the rules of the Oil Conservation Division have been complied with and that the information given on this form and the attached list of wells is true and complete to the best of my knowledge and belief.

Signature: Robert H. Knauss

Printed name: Robert H. Knauss

Title: Vice President - Law of AmeriGas Eagle Holdings, Inc., the general partner of AmeriGas Eagle Propane, L.P.

Date: April 8, 2002 Phone: (610) 337 - 1000, ext. 3393

* , upon the filing and approval of this Form C-104B,

NMOCD Approval

Signature: Jim W. Brown

Printed Name: District Supervisor

District:

Date: APR 22 2002

MAW

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

Form C-104A
March 19, 2001

Submit 1 copy of the final affected wells list along with 1 copy of this form per number of wells on that list to appropriate District Office

Change of Operator

Previous Operator Information:		New Operator Information:	
OGRID:	186724	Effective Date:	7-15-02
Name:	AmeriGas Eagle Propane, L.P.	New Ogrid:	214766
Address:	460 NorthGulph Road	New Name:	Loco Hills GSF Ltd.
Address:		Address:	158 Deer Creek Drive
City, State, Zip:	King of Prussia, PA 19406	Address:	
		City, State, Zip:	Aledo, TX 76008

I hereby certify that the rules of the Oil Conservation Division have been complied with and that the information on this form and the attached list of wells is true and complete to the best of my knowledge and belief.

New Operator Signature: Mitch Johnson

Printed name: MITCH JOHNSON

Title: MANAGER & PARTNER

Date: 6/25/02 Phone: 817-441-6568

JUL 2002
RECEIVED
OCD - ARTESIA

Previous operator complete below:

Previous Operator: AmeriGas Eagle Propane, L.P.

Previous OGRID: 186724

Signature: Robert H. Knauss

Printed Name: Robert H. Knauss, Esq.
Vice President - Law of AmeriGas Eagle Holdings, Inc. the general partner of AmeriGas Eagle Propane, L.P.

NMOCD Approval

Signature:

Printed Name:

District:

Date: 1-28-03

NEW PROPERTY CODE - 31981

This C-104A is for the Loco Hills GSF LTD Leonard #3 only

30-015-06194

Submit 3 Copies To Appropriate District Office
District I
1625 N. French 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

State of New Mexico
Energy, Minerals and Natural Resources

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-103
Revised March 25, 1999

WELL API NO. 06194

5. Indicate Type of Lease STATE ☑ FEE ☐

6. State Oil & Gas Lease No. RA-635

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.)

7. Lease Name or Unit Agreement Name: LEONARD

1. Type of Well: Oil Well ☐ Gas Well ☐ Other Salt Dome Storage — Loco Hills G.S.P. LTD

2. Name of Operator: Loco Hills G.S.P. LTD

8. Well No. 3

3. Address of Operator: PO Box 37 Loco Hills, New Mexico 88255

9. Pool name or Wildcat

4. Well Location

Unit Letter L : 1975 feet from the South line and 560 feet from the West line

Section 22 Township 17S Range 29E NMPM County Eddy

10. Elevation (Show whether DR, RKB, RT, GR, etc.) GR

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

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
PERFORM REMEDIAL WORK	☑	PLUG AND ABANDON	☐	REMEDIAL WORK	☐	ALTERING CASING	☐
TEMPORARILY ABANDON	☐	CHANGE PLANS	☐	COMMENCE DRILLING OPNS.	☐	PLUG AND ABANDONMENT	☐
PULL OR ALTER CASING	☐	MULTIPLE COMPLETION	☐	CASING TEST AND CEMENT JOB	☐		
OTHER:			☐	OTHER:			☐

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 Multiple Completions: Attach wellbore diagram of proposed completion or recompilation.

Sonar Test of well for Capacity and configuration

After Sonar Test will run a M.I.T test on casing (300psig for 30 minutes)

Open hole cavern test (1½ times normal operating pressure for 4 hours

Estimated Start date April 21, 2003

MAR 2003 RECEIVED OCD - ARTESIA

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

SIGNATURE John B Smith TITLE Terminal Operator DATE 3/24/03

Type or print name John B. Smith Telephone No. 505-677-2333

(This space for State use)

APPPROVED BY Mark Wolfenden TITLE Envirc. Eng. Spec. DATE 3/25/2003

Conditions of approval, if any:

* Please notify N.M.O.C.D. To witness.

Submit 3 Copies To Appropriate District Office
District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Ave., Artesia, NM 88210
District III
1000 Rio Brazos Rd., 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

RECEIVED
FEB 27 2006
OCD-ARTESIA

Form C-103
Revised June 10, 2003

WELL API NO. 30-15-06194
5. Indicate Type of Lease STATE [X] FEE [ ]
6. State Oil & Gas Lease No. BL-635

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.)

7. Lease Name or Unit Agreement Name: Leonard
8. Well Number: Leonard State #3
9. OGRID Number:
10. Pool name or Wildcat:

1. Type of Well: Oil Well [ ] Gas Well [✓] Other Salt Dome Storage
2. Name of Operator: Loco Hills GSF LTD
3. Address of Operator: 1231 Old Artesia Rd. Aledo, Texas 76008
4. Well Location

Unit Letter L : 1975 feet from the South line and 560 feet from the West line

Section 22 Township 17S Range 29E NMPM County Eddy

11. Elevation (Show whether DR, RKB, RT, GR, etc.) GR

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

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
PERFORM REMEDIAL WORK	[ ]	PLUG AND ABANDON	[ ]	REMEDIAL WORK	[✓]	ALTERING CASING	[ ]
TEMPORARILY ABANDON	[ ]	CHANGE PLANS	[ ]	COMMENCE DRILLING OPNS.	[ ]	PLUG AND ABANDONMENT	[ ]
PULL OR ALTER CASING	[ ]	MULTIPLE COMPLETION	[ ]	CASING TEST AND CEMENT JOB	[ ]		
OTHER:	[ ]			OTHER:			[ ]

13. 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 Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

02/15/06 Sonared well, Ran MIT on casing using high pressure chart recorder (400#-30min) Packer set at 492'

02/16/06 Ran 600' 2 3/8 J-55 plastic coated 2 7/8" tubing, Hydro static test done on tubing (1500#) Nipple up.

02/21/06 Expected Nitrogen for open hole Nitrogen test. (Appx 400#)

02/23/06 Ran 4hr open hole Nitrogen test using high pressure chart recorder (400#)

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

SIGNATURE John B Smith TITLE Terminal Operator DATE 02/24/06

Type or print name John B. Smith E-mail address: Telephone No. (505) 677-2331

(This space for State use)

Accepted for record - NMOCD

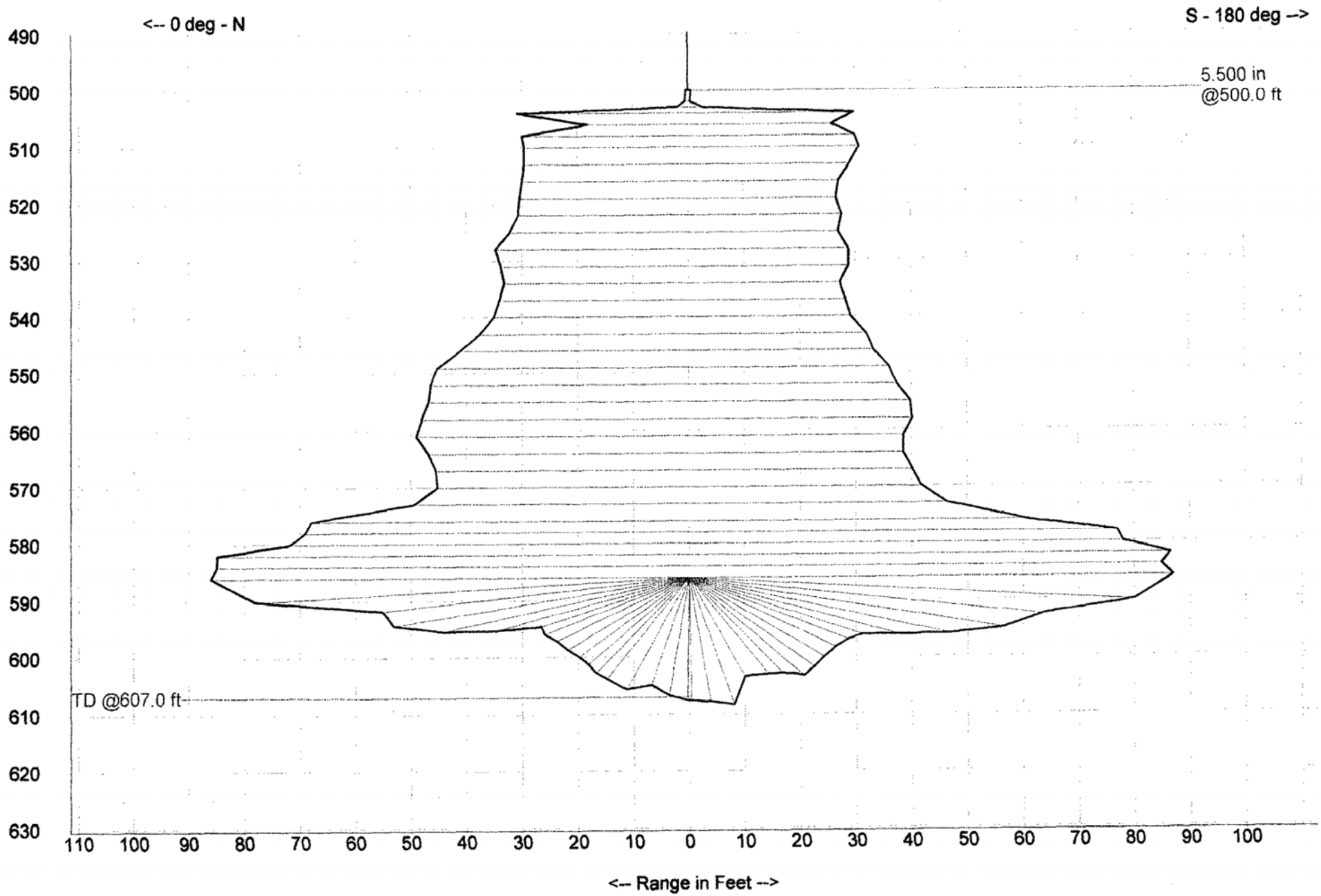
APPPROVED BY _____ TITLE _____ DATE _____

Conditions of approval, if any:

LOCO HILLS G.S.F.
LOCO HILLS, NM

SONARWIRE, INC
Vertical Cross Section

STORAGE WELL NO. 3
Wed, Feb 15, 2006



SONARWIRE INC.
Depth versus Volume

LOCO HILLS G.S.F.
LOCO HILLS, NM

STORAGE WELL NO. 3
Wed, Feb 15, 2006

Depth	Barrels per ft.	Barrels total	Gallons per ft.	Gallons total
501	0.1	0.1	5.3	5.3
502	0.1	0.3	5.4	10.7
503	0.1	0.4	5.7	16.4
504	1.8	2.2	74.7	91.1
505	421.1	423.2	17685.3	17776.4
506	386.6	809.9	16237.7	34014.1
507	401.5	1211.4	16862.9	50877.0
508	462.3	1673.7	19416.8	70293.8
509	531.3	2204.9	22312.9	92606.7
510	520.1	2725.1	21846.3	114453.0
511	509.3	3234.4	21389.9	135842.8
512	497.7	3732.1	20905.4	156748.2
513	486.4	4218.5	20429.7	177178.0
514	475.3	4693.8	19962.9	197140.8
515	467.0	5160.8	19612.3	216753.1
516	458.8	5619.6	19270.2	236023.3
517	450.9	6070.5	18936.5	254959.8
518	450.1	6520.6	18906.0	273865.9
519	449.5	6970.1	18877.9	292743.8
520	448.9	7419.0	18852.3	311596.1
521	451.7	7870.7	18972.5	330568.6
522	454.7	8325.3	19095.9	349664.5
523	457.7	8783.0	19222.4	368886.9
524	466.9	9249.9	19610.1	388497.0
525	476.3	9726.2	20005.1	408502.2
526	485.9	10212.1	20407.4	428909.5
527	504.1	10716.2	21172.6	450082.2
528	522.7	11238.9	21953.5	472035.6
529	541.7	11780.6	22749.9	494785.6
530	546.4	12327.0	22949.0	517734.6
531	551.2	12878.2	23150.3	540884.8
532	556.0	13434.3	23353.8	564238.7
533	546.8	13981.0	22964.0	587202.7
534	537.6	14518.6	22579.9	609782.6
535	528.6	15047.2	22201.7	631984.3
536	540.6	15587.9	22706.5	654690.7
537	552.8	16140.7	23218.9	677909.6
538	565.2	16705.9	23739.0	701648.7
539	578.1	17284.0	24281.3	725930.0
540	591.3	17875.3	24832.9	750762.9
541	604.6	18479.9	25393.7	776156.6
542	625.9	19105.8	26285.8	802442.4
543	647.6	19753.3	27198.1	829640.5
544	669.8	20423.1	28130.7	857771.2
545	685.9	21109.0	28806.2	886577.4
546	702.2	21811.2	29492.5	916069.9

LOCO HILLS G.S.F.
LOCO HILLS, NM

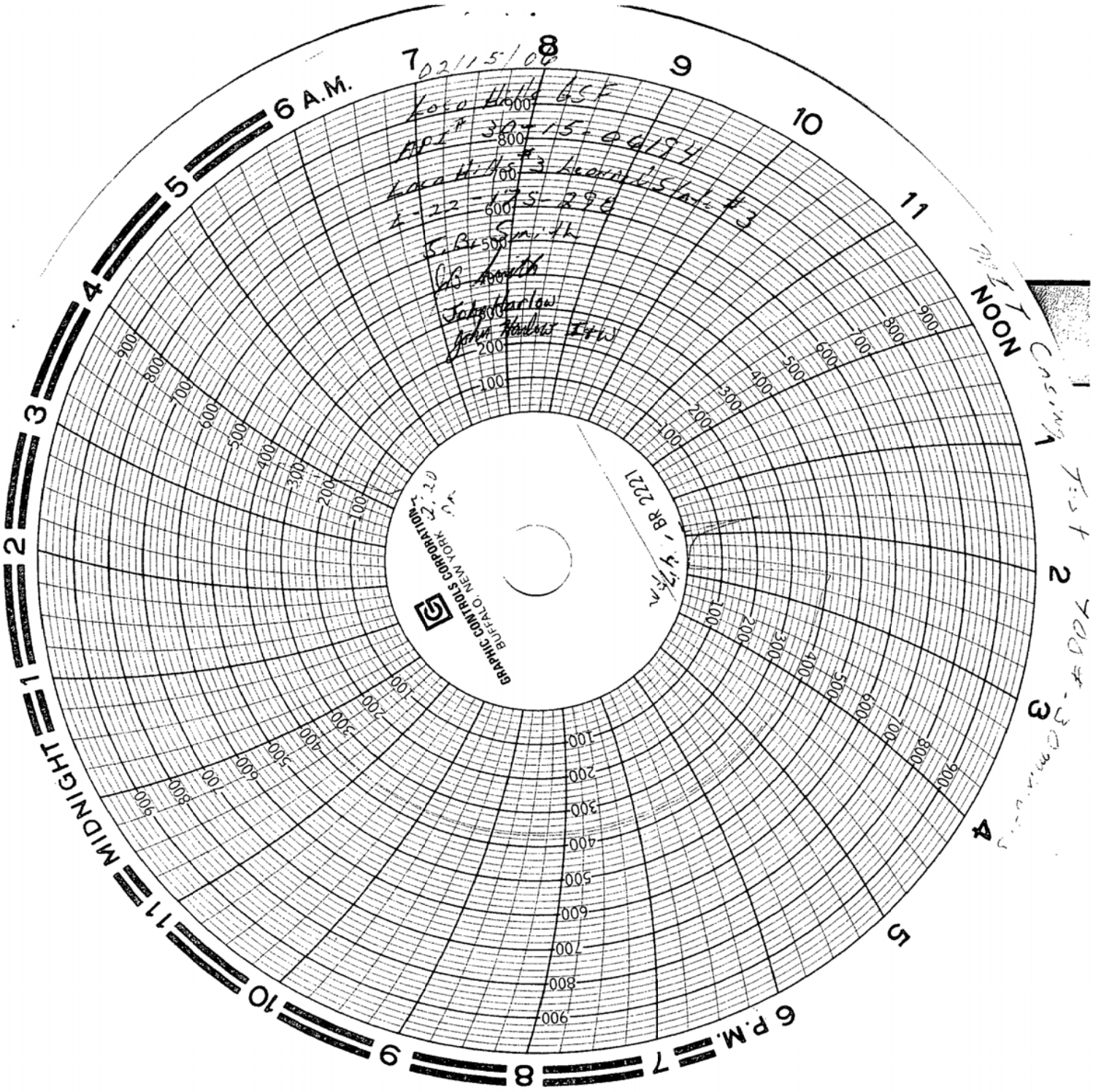
STORAGE WELL NO. 3
Wed, Feb 15, 2006

Depth	Barrels per ft.	Barrels total	Gallons per ft.	Gallons total
547	718.8	22530.0	30189.6	946259.4
548	754.2	23284.2	31675.3	977934.7
549	790.5	24074.7	33202.1	1011136.8
550	827.9	24902.5	34769.9	1045906.7
551	844.9	25747.4	35484.2	1081390.8
552	862.1	26609.5	36209.8	1117600.6
553	879.7	27489.2	36946.9	1154547.5
554	904.9	28394.1	38006.1	1192553.6
555	930.7	29324.8	39087.7	1231641.3
556	956.9	30281.7	40191.6	1271833.0
557	973.2	31254.9	40873.8	1312706.8
558	989.6	32244.6	41564.5	1354271.3
559	1006.3	33250.8	42263.7	1396535.0
560	1008.5	34259.3	42355.4	1438890.4
561	1010.8	35270.1	42454.6	1481344.9
562	1013.4	36283.5	42561.2	1523906.1
563	1009.9	37293.4	42415.4	1566321.5
564	1006.7	38300.1	42283.4	1608604.9
565	1003.9	39304.1	42165.2	1650770.1
566	1018.9	40323.0	42794.7	1693564.8
567	1034.5	41357.5	43450.9	1737015.7
568	1050.8	42408.3	44134.0	1781149.7
569	1103.5	43511.8	46346.4	1827496.2
570	1158.4	44670.2	48653.8	1876149.9
571	1215.6	45885.9	51056.0	1927205.9
572	1268.5	47154.3	53276.2	1980482.1
573	1324.6	48478.9	55632.4	2036114.5
574	1383.9	49862.8	58124.8	2094239.3
575	1727.0	51589.9	72535.0	2166774.3
576	2115.0	53704.9	88830.5	2255604.7
577	2547.9	56252.8	107011.3	2362616.1
578	2806.7	59059.4	117880.4	2480496.4
579	3092.7	62152.1	129891.5	2610387.9
580	3149.3	65301.4	132270.6	2742658.6
581	3206.8	68508.2	134685.0	2877343.5
582	3725.3	72233.5	156462.2	3033805.7
583	4283.6	76517.1	179913.0	3213718.7
584	4292.4	80809.5	180281.7	3394000.4
585	4301.5	85111.0	180662.4	3574662.8
586	4290.1	89401.1	180185.0	3754847.7
587	4279.1	93680.3	179724.2	3934572.0
588	4096.7	97777.0	172060.3	4106632.3
589	3918.2	101695.2	164565.6	4271197.9
590	3744.0	105439.2	157248.7	4428446.6
591	4084.0	109523.2	171528.5	4599975.1
592	3349.4	112872.6	140673.1	4740648.2
593	2426.3	115298.9	101905.2	4842553.4
594	2041.1	117340.0	85727.0	4928280.4

LOCO HILLS G.S.F.
LOCO HILLS, NM

STORAGE WELL NO. 3
Wed, Feb 15, 2006

Depth	Barrels per ft.	Barrels total	Gallons per ft.	Gallons total
595	1859.8	119199.8	78112.6	5006393.0
596	1471.9	120671.7	61818.2	5068211.2
597	1262.5	121934.2	53026.0	5121237.2
598	825.7	122760.0	34681.3	5155918.5
599	629.9	123389.9	26456.6	5182375.2
600	512.8	123902.6	21536.0	5203911.1
601	429.7	124332.3	18047.0	5221958.2
602	315.0	124647.4	13230.6	5235188.8
603	268.6	124915.9	11279.8	5246468.6
604	218.4	125134.4	9174.9	5255643.5
605	183.4	125317.7	7701.5	5263345.0
606	147.4	125465.1	6190.6	5269535.6
607	112.1	125577.3	4709.0	5274244.5
608	84.0	125661.3	3528.0	5277772.5
609	49.8	125711.0	2089.8	5279862.3
610	17.8	125728.8	749.2	5280611.5
611	1.7	125730.6	72.8	5280684.3



BOP In place when tested

Wildcat Measurement

Calibration Certificate

Pressure Recorder

Serial Number: 6068

Pressure Range 1000# **p.s.i. accuracy +/-** 0.2% **% Full Scale** _____ **p.s.i.** _____

Increasing Pressure			Decreasing Pressure		
Applied Pressure	*Indicated Pressure*	*Difference*	*Applied Pressure*	*Indicated Pressure*	*Difference*
0.0#	0.0#	0.0#	800.0#	800.0#	0.0#
100.0#	100.0#	0.0#	600.0#	600.0#	0.0#
300.0#	300.0#	0.0#	400.0#	400.0#	0.0#
500.0#	500.0#	0.0#	200.0#	200.0#	0.0#
700.0#	700.0#	0.0#	0.0#	0.0#	0.0#
1000.0#	1000.0#	0.0#			

Calibrated By: Crystal **Gauge** **Deadweight** _____

This Is To Certify That This Recorder Has Been Inspected And Tested.

Remarks _____

Date Of Calibration 07-21-2005 **Inspector** _____

Bus: (432) 683-3033
Fax: (432) 570-5253

2 7/8 (SIZE) used (WEIGHT) L-55 (GRADE) IPC (COUPLING)

MIDLAND
pipe
&
equipment

P.O. Box 8715
Midland, Tx 79708-8715

9-15-11 (DATE)

PAGE 1 OF ___ PAGE(S)

Tu. 19

Tu Ft. 599.70	From Stock Of: Midkiff Rope + Zip	Shipped To: Loco Hills Gas Storage Loco Hills, N.M.	Trucking Co. MIDE
Part of			

19 jts 599.70' - 2 7/8 L-55 IPC used WF
saw IPC long

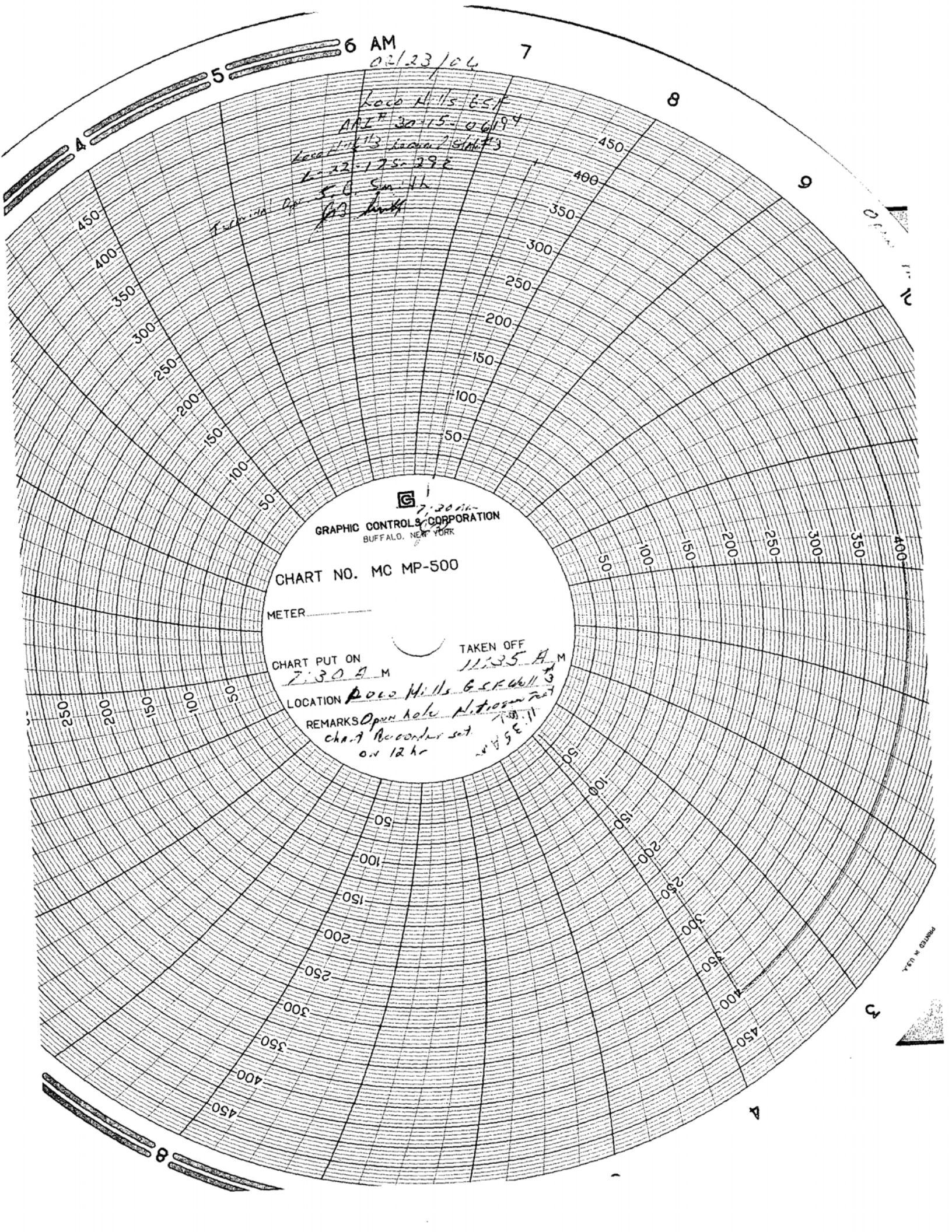
1	JT#	FEET	TOTAL	JT#	FEET	TOTAL	JT#	FEET	TOTAL
	1	32.90	32.90						
	2	32.00	64.90						
	3	32.00	96.90						
	4	31.60	128.50						
	5	33.00	161.50						
	6	31.40	192.90						
	7	31.30	224.20						
	8	30.80	255.00						
	9	30.90	285.90						
	10	28.80	314.70						
	11	29.20	343.90						
	12	31.80	375.70						
	13	32.00	407.70						
	14	31.60	439.30						
	15	32.10	471.40						
	16	31.80	503.20						
	17	31.60	534.80						
	18	31.80	566.60						
	19	33.10	599.70						

5'93' + 4' perforated sub

NEW LIMITED SERVICE/REJECT AND USED MATERIALS ARE SOLD "AS IS, WITHOUT WARRANTY OF MERCHANTABILITY OR FITNESS" ALL SALES MADE IN MIDLAND CO. TX. AND REMAIN THE PROPERTY OF MIDLAND PIPE UNTIL PAID IN FULL.

DRIVER

PURCHASEER


6 AM
02/23/04
Loco Hills 6SK
API# 30-15-06194
Location 13 Unit J Sec 3
T-22-S R-29-E
Surface Use: S.D. Sm. Lk
7:30 AM
GRAPHIC CONTROLS CORPORATION
BUFFALO, NEW YORK
CHART NO. MC MP-500
METER
CHART PUT ON 7:30 AM
TAKEN OFF 11:35 AM
LOCATION Loco Hills 6SK Well 3
REMARKS Open hole Nitrogen Test
chart Recorder set
on 12 hr
11:35 AM
PRINTED IN U.S.A.

Wildcat Measurement

Calibration Certificate

Pressure Recorder

Serial Number: 265-50140

Pressure Range 500# **p.s.i. accuracy +/-** 0.2 **% Full Scale** _____ **p.s.i.** _____

Increasing Pressure			Decreasing Pressure		
Applied Pressure	*Indicated Pressure*	*Difference*	*Applied Pressure*	*Indicated Pressure*	*Difference*
0.0#	0.0#	0.0	400#	400#	0.0
50#	50#	0.0	300#	300#	0.0
150#	150#	0.0	200#	200#	0.0
250#	250#	0.0	100#	100#	0.0
350#	350#	0.0	0.0#	0.0#	0.0
500#	500#	0.0			

Calibrated By: Crystal **Gauge** **Deadweight** _____

This Is To Certify That This Recorder Has Been Inspected And Tested.

Remarks _____

Date Of Calibration 02/21/2006 **Inspector** _____

JOB LOG

TICKET # 4228851	TICKET DATE 02/21/06			
REGION NORTH AMERICA LAND	NWA / COUNTRY Permain Basin / USA	BDA / STATE Midland	COUNTY EDDY	STATE NM
MBU ID / EMPL # OD22102/ 301905	H.E.S EMPLOYEE NAME F. Castillo	PSL DEPARTMENT P.E./ Stimulation		
LOCATION Odessa, Tx.	COMPANY Loco Hills	CUSTOMER REP JB Smith	PHONE 505.677.2331	
TICKET AMOUNT 10,310.00 / 9,919.60	WELL TYPE gas	API/UWI #		
WELL LOCATION Loco Hills N.M.	DEPARTMENT Nitrogen Services	JOB PURPOSE CODE 14104		
LEASE / WELL # Leonard State #3	SEC / TWP / RNG N/A			

Chart No.	Time	Rate (BPM)	Volume (BBL/GAL)	Pmps T	Pmps C	Press.(PSI) Tbg	Press.(PSI) Csg	Job Description / Remarks
CST	08:45							ARRIVE ON LOCATION 02-21-06
	09:50							CONDUCT LOCATION ASSESSMENT SAFETY MEETING
	08:55							Spot & Set-up N2 Equip
09 50								Cool down
	10:15							Safety Meetings
	10:20				✓		1,000	TEST LINE
	10:26	300			✓		70	START N2
	10:31	300			✓		245	5 min N2
	10:33	400			✓		265	Increase N2 Rate
	10:41	400	5200		✓		305	15 min N2
	10:42	400	5800		✓		310	SHUT DOWN N2 WELL HEAD LEAK
	03:04	400			✓		130	START N2
	03:09	450	8,000		✓		210	5 min N2
	03:19	450	12,500		✓		240	15 min N2
	03:34	450	20,200		✓		260	30 min N2
	03:44	450	24,700		✓		300	40 min N2
	03:46	700	25,000		✓		350	Increase N2
	04:15	400	41,000		✓		460	SHUT DOWN
								20,00 SCF Down Hole
								20,000 SCF cool down
								40,000 SCF N2 Total
								8 - hours on Loc

Submit 3 Copies To Appropriate District Office
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State of New Mexico
Energy, Minerals and Natural Resources

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-103
Revised June 10, 2003

WELL API NO. 30-15-06194
5. Indicate Type of Lease STATE ☑ FEE ☐
6. State Oil & Gas Lease No. BL-635

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.)

7. Lease Name or Unit Agreement Name: Leonard
8. Well Number: 3
9. OGRID Number:
10. Pool name or Wildcat:

1. Type of Well: Oil Well ☐ Gas Well ☐ Other SWD Storage
2. Name of Operator: Loco Hills GSF L.P.
3. Address of Operator: 2211 Old Santa Fe Rd Aptos, Ca 95003
4. Well Location
Unit Letter L : 1925 feet from the South line and 560 feet from the West line
Section 22 Township 17-S Range 29-E NMPM County Eddy
11. Elevation (Show whether DF, RKB, RT, GR, etc.) GL

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

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
PERFORM REMEDIAL WORK	☑	PLUG AND ABANDON	☐	REMEDIAL WORK	☐	ALTERING CASING	☐
TEMPORARILY ABANDON	☐	CHANGE PLANS	☐	COMMENCE DRILLING OPNS.	☐	PLUG AND ABANDONMENT	☐
PULL OR ALTER CASING	☑	MULTIPLE COMPLETION	☐	CASING TEST AND CEMENT JOB	☐		
OTHER: Sf squeeze			☐	OTHER:			☐

13. 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 Multiple Completions: Attach wellbore diagram of proposed completion or recompletion. Pull 2 7/8" tubing, casing work. Set tension packer w/ tail 10ft of below csg shoe. Run MIT (300# for 30 min) using calibrated pressure gauge & recorder. Run new 2 7/8" IPC tubing, nipple up treat open hole w/ nitrogen test (300# for 4hrs) using a calibrated gauge chart recorder.

If MIT on casing fails, Run COL - set CIBP - spot 5 sacks cement - Run PLUS 10M 4" casing. Circulate cement up backside to surface. Run COL & MIT on new casing. Install 2 7/8" PC IPC tubing nipple up & run open hole N2 test. Will notify OCD before work and before any test is run.

Estimated start date the same as current pooling unit

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

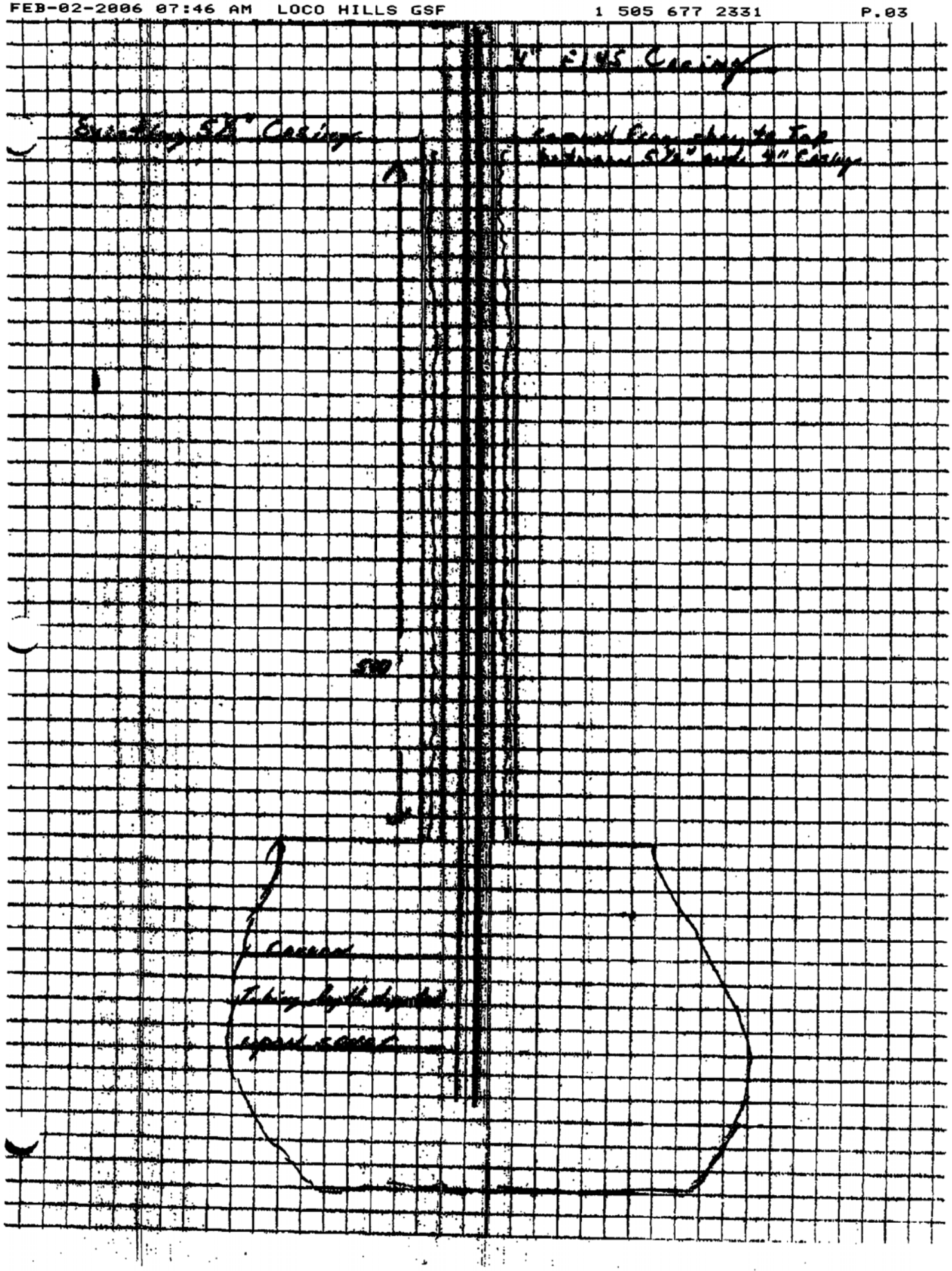
SIGNATURE Tobin B. Smith TITLE Technical Operator DATE 2-1-2006

Type or print name Tobin B. Smith E-mail address: Telephone No. (505) 677-2313

(This space for State use)

APPPROVED BY: Accepted for record NMOCD TITLE DATE MAR 07 2006

Conditions of approval, if any:



Submit 3 Copies To Appropriate District Office
District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Ave., Artesia, NM 88210
District III
1000 Rio Brazos Rd., 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

Form C-103
Revised June 10, 2003

WELL API NO. 30-15-06194
5. Indicate Type of Lease STATE ☑ FEE ☐
6. State Oil & Gas Lease No. BL-635

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.)

7. Lease Name or Unit Agreement Name: Leonard
8. Well Number: 3
9. OGRID Number: 000-ARTESIA
10. Pool name or Wildcat:

1. Type of Well: Oil Well ☐ Gas Well ☐ Other Salt dome Storage
2. Name of Operator: Lea Hills GSF LTD
3. Address of Operator: 1231 Old Aruetha Rd Abeda, Texas 79008
4. Well Location
Unit Letter L : 1975 feet from the South line and 560 feet from the West line
Section 22 Township 17S Range 29E NMPM County Eddy
11. Elevation (Show whether DR, RKB, RT, GR, etc.) GR

RECEIVED
FEB 13 2006

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

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK ☑	PLUG AND ABANDON ☐	REMEDIAL WORK ☐	ALTERING CASING ☐
TEMPORARILY ABANDON ☐	CHANGE PLANS ☐	COMMENCE DRILLING OPNS. ☐	PLUG AND ABANDONMENT ☐
PULL OR ALTER CASING ☑ If needed	MULTIPLE COMPLETION ☐	CASING TEST AND CEMENT JOB ☐	
OTHER: ☐		OTHER: ☐	

13. 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 Multiple Completions: Attach wellbore diagram of proposed completion or recompletion. Pull 2⅞" tubing, sonar well. Set tenison packer within 4' of bottom of casing shoe. Run MIT (300# for 30 min) using calibrated pressure chart recorder. Run new 2⅞" J55 tubing, nipple up to run open hole nitrogen test (300# for 4hr.) using a calibrated pressure chart recorder

If MIT on casing fails. Run CBL - set CIBP - spot 5 sacks cement - Run FL45 10# 4" casing. Circulate cement up backside to surface. Run CBL + MIT on new casing. Install 2⅞" FL4S tubing nipple up and run open hole Nitrogen test. Will notify OCD zone works and before any test is run

Estimated start date dependent upon pulling unit

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

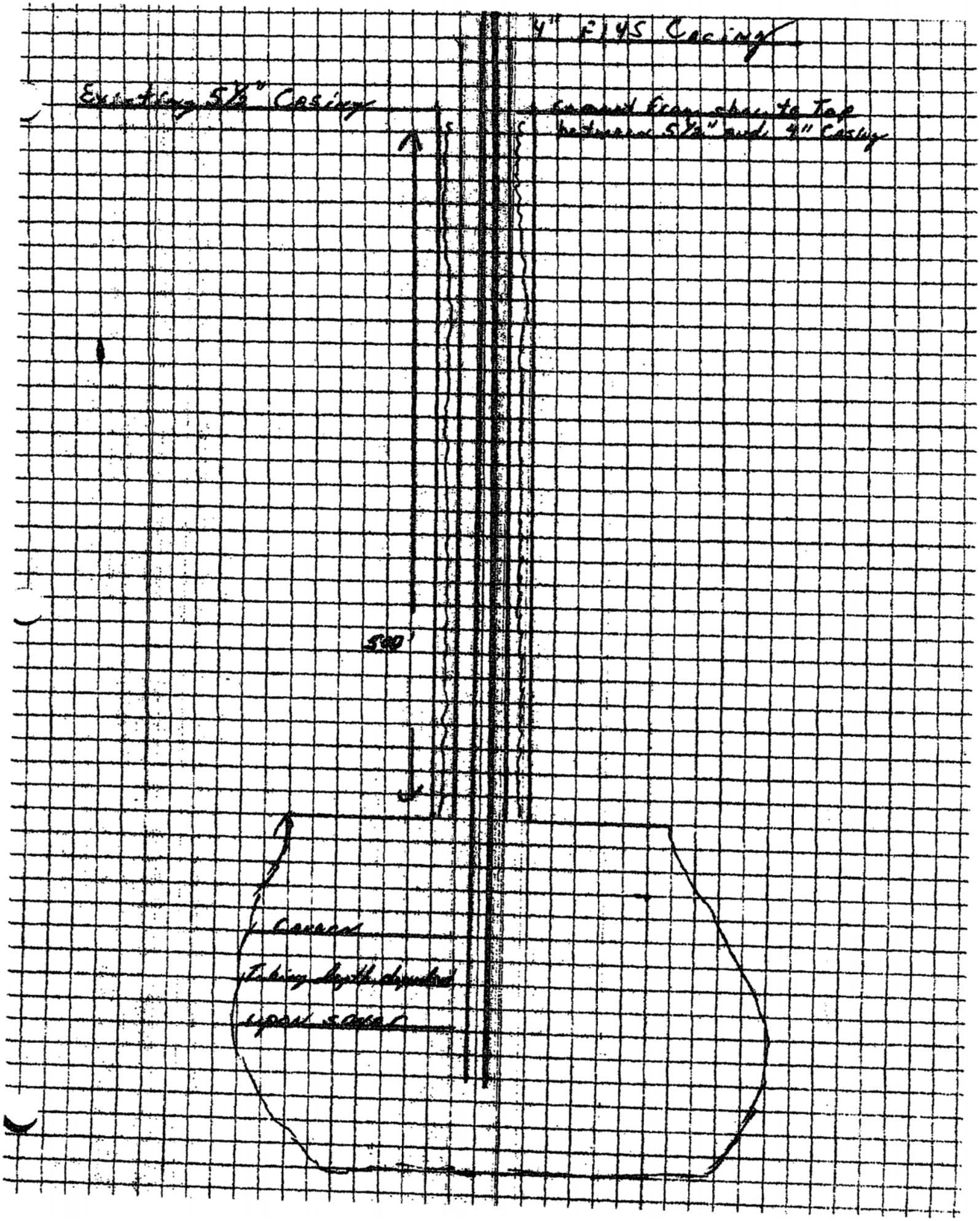
SIGNATURE John B Smith TITLE Terminal Operator DATE Feb 6, 2006

Type or print name John B. Smith E-mail address: Telephone No. (505) 677-2

(This space for State use)

APPPROVED BY Accepted for record NMOCD TITLE DATE MAR 07 2006

Conditions of approval, if any:


4" FJ45 Casing
Existing 5½" Casing
Cement from shoe to top between 5½" and 4" Casing
500'
Cement
Tubing depth depended upon cement

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State of New Mexico
Energy, Minerals and Natural Resources

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-103
Revised June 10, 2003

2006 FEB 27 PM 2 30 RECEIVED
MAR 07 2006

WELL API NO.	30-15-06194
5. Indicate Type of Lease	STATE ☒ FEE ☐
6. State Oil & Gas Lease No.	BL-635
7. Lease Name or Unit Agreement Name	Leonard
8. Well Number	Leonard State #3
9. OGRID Number	
10. Pool name or Wildcat	

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.)

1. Type of Well:
Oil Well ☐ Gas Well ☑ Other Salt Dome Storage

2. Name of Operator
Loco Hills GSF LTD

3. Address of Operator
1231 Old Artesia Rd. Hobbs, Texas 76008

4. Well Location
Unit Letter L : 1975 feet from the South line and 560 feet from the West line
Section 22 Township 17S Range 29E NMPM County Eddy

11. Elevation *(Show whether DR, RKB, RT, GR, etc.)*
GR

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

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK ☐	PLUG AND ABANDON ☐	REMEDIAL WORK ☑	ALTERING CASING ☐
TEMPORARILY ABANDON ☐	CHANGE PLANS ☐	COMMENCE DRILLING OPNS. ☐	PLUG AND ABANDONMENT ☐
PULL OR ALTER CASING ☐	MULTIPLE COMPLETION ☐	CASING TEST AND CEMENT JOB ☐	
OTHER: ☐		OTHER: ☐	

13. 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 Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

02/15/06 Sonared well, Ran MIT on casing using high pressure chart recorder (400# - 30 min) Packer set at 492'

02/16/04 Ran 600' 2⅜ J-55 plastic coated 2⅞" tubing, Hydro static test done on tubing (1500#) Nipple up.

02/21/06 Expected Nitrogen for open hole Nitrogen test. (Appx 400#)

02/23/04 Ran 4hr open hole Nitrogen test using high pressure chart recorder (400#)

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

SIGNATURE John B Smith TITLE Terminal Operator DATE 02/24/06

Type or print name John B. Smith E-mail address: Telephone No. (505) 677-2

(This space for State use)

APPPROVED BY _____ TITLE _____ DATE _____

Conditions of approval, if any:

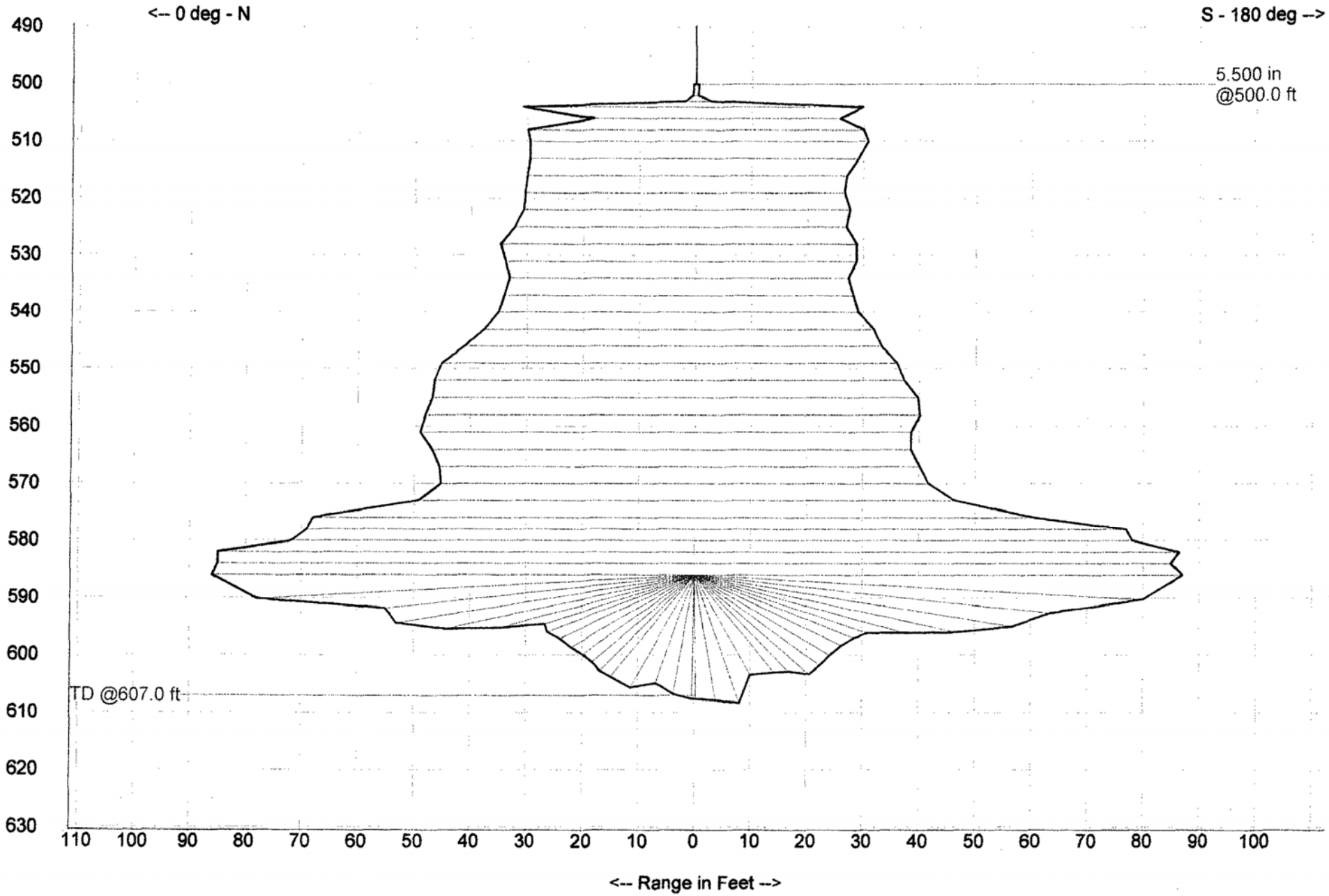
Accepted for record - NMOCD

MAR 14 2006

LOCO HILLS G.S.F.
LOCO HILLS, NM

SONARWIRE, INC
Vertical Cross Section

STORAGE WELL NO. 3
Wed, Feb 15, 2006



SONARWIRE INC.
Depth versus Volume

LOCO HILLS G.S.F.
LOCO HILLS, NM

STORAGE WELL NO. 3
Wed, Feb 15, 2006

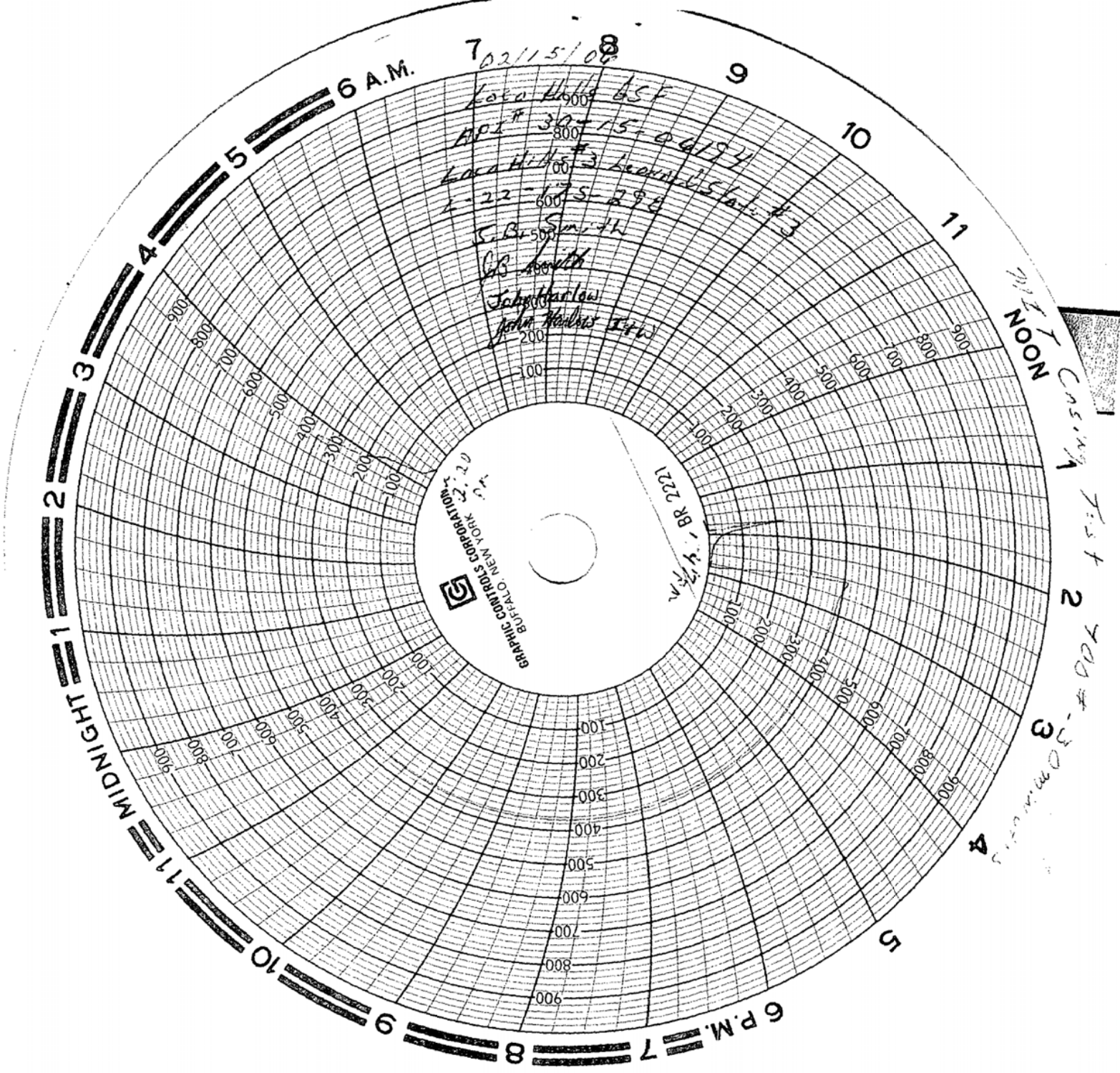
Depth	Barrels per ft.	Barrels total	Gallons per ft.	Gallons total
501	0.1	0.1	5.3	5.3
502	0.1	0.3	5.4	10.7
503	0.1	0.4	5.7	16.4
504	1.8	2.2	74.7	91.1
505	421.1	423.2	17685.3	17776.4
506	386.6	809.9	16237.7	34014.1
507	401.5	1211.4	16862.9	50877.0
508	462.3	1673.7	19416.8	70293.8
509	531.3	2204.9	22312.9	92606.7
510	520.1	2725.1	21846.3	114453.0
511	509.3	3234.4	21389.9	135842.8
512	497.7	3732.1	20905.4	156748.2
513	486.4	4218.5	20429.7	177178.0
514	475.3	4693.8	19962.9	197140.8
515	467.0	5160.8	19612.3	216753.1
516	458.8	5619.6	19270.2	236023.3
517	450.9	6070.5	18936.5	254959.8
518	450.1	6520.6	18906.0	273865.9
519	449.5	6970.1	18877.9	292743.8
520	448.9	7419.0	18852.3	311596.1
521	451.7	7870.7	18972.5	330568.6
522	454.7	8325.3	19095.9	349664.5
523	457.7	8783.0	19222.4	368886.9
524	466.9	9249.9	19610.1	388497.0
525	476.3	9726.2	20005.1	408502.2
526	485.9	10212.1	20407.4	428909.5
527	504.1	10716.2	21172.6	450082.2
528	522.7	11238.9	21953.5	472035.6
529	541.7	11780.6	22749.9	494785.6
530	546.4	12327.0	22949.0	517734.6
531	551.2	12878.2	23150.3	540884.8
532	556.0	13434.3	23353.8	564238.7
533	546.8	13981.0	22964.0	587202.7
534	537.6	14518.6	22579.9	609782.6
535	528.6	15047.2	22201.7	631984.3
536	540.6	15587.9	22706.5	654690.7
537	552.8	16140.7	23218.9	677909.6
538	565.2	16705.9	23739.0	701648.7
539	578.1	17284.0	24281.3	725930.0
540	591.3	17875.3	24832.9	750762.9
541	604.6	18479.9	25393.7	776156.6
542	625.9	19105.8	26285.8	802442.4
543	647.6	19753.3	27198.1	829640.5
544	669.8	20423.1	28130.7	857771.2
545	685.9	21109.0	28806.2	886577.4
546	702.2	21811.2	29492.5	916069.9

Depth	Barrels per ft.	Barrels total	Gallons per ft.	Gallons total
547	718.8	22530.0	30189.6	946259.4
548	754.2	23284.2	31675.3	977934.7
549	790.5	24074.7	33202.1	1011136.8
550	827.9	24902.5	34769.9	1045906.7
551	844.9	25747.4	35484.2	1081390.8
552	862.1	26609.5	36209.8	1117600.6
553	879.7	27489.2	36946.9	1154547.5
554	904.9	28394.1	38006.1	1192553.6
555	930.7	29324.8	39087.7	1231641.3
556	956.9	30281.7	40191.6	1271833.0
557	973.2	31254.9	40873.8	1312706.8
558	989.6	32244.6	41564.5	1354271.3
559	1006.3	33250.8	42263.7	1396535.0
560	1008.5	34259.3	42355.4	1438890.4
561	1010.8	35270.1	42454.6	1481344.9
562	1013.4	36283.5	42561.2	1523906.1
563	1009.9	37293.4	42415.4	1566321.5
564	1006.7	38300.1	42283.4	1608604.9
565	1003.9	39304.1	42165.2	1650770.1
566	1018.9	40323.0	42794.7	1693564.8
567	1034.5	41357.5	43450.9	1737015.7
568	1050.8	42408.3	44134.0	1781149.7
569	1103.5	43511.8	46346.4	1827496.2
570	1158.4	44670.2	48653.8	1876149.9
571	1215.6	45885.9	51056.0	1927205.9
572	1268.5	47154.3	53276.2	1980482.1
573	1324.6	48478.9	55632.4	2036114.5
574	1383.9	49862.8	58124.8	2094239.3
575	1727.0	51589.9	72535.0	2166774.3
576	2115.0	53704.9	88830.5	2255604.7
577	2547.9	56252.8	107011.3	2362616.1
578	2806.7	59059.4	117880.4	2480496.4
579	3092.7	62152.1	129891.5	2610387.9
580	3149.3	65301.4	132270.6	2742658.6
581	3206.8	68508.2	134685.0	2877343.5
582	3725.3	72233.5	156462.2	3033805.7
583	4283.6	76517.1	179913.0	3213718.7
584	4292.4	80809.5	180281.7	3394000.4
585	4301.5	85111.0	180662.4	3574662.8
586	4290.1	89401.1	180185.0	3754847.7
587	4279.1	93680.3	179724.2	3934572.0
588	4096.7	97777.0	172060.3	4106632.3
589	3918.2	101695.2	164565.6	4271197.9
590	3744.0	105439.2	157248.7	4428446.6
591	4084.0	109523.2	171528.5	4599975.1
592	3349.4	112872.6	140673.1	4740648.2
593	2426.3	115298.9	101905.2	4842553.4
594	2041.1	117340.0	85727.0	4928280.4

LOCO HILLS G.S.F.
LOCO HILLS, NM

STORAGE WELL NO. 3
Wed, Feb 15, 2006

Depth	Barrels per ft.	Barrels total	Gallons per ft.	Gallons total
595	1859.8	119199.8	78112.6	5006393.0
596	1471.9	120671.7	61818.2	5068211.2
597	1262.5	121934.2	53026.0	5121237.2
598	825.7	122760.0	34681.3	5155918.5
599	629.9	123389.9	26456.6	5182375.2
600	512.8	123902.6	21536.0	5203911.1
601	429.7	124332.3	18047.0	5221958.2
602	315.0	124647.4	13230.6	5235188.8
603	268.6	124915.9	11279.8	5246468.6
604	218.4	125134.4	9174.9	5255643.5
605	183.4	125317.7	7701.5	5263345.0
606	147.4	125465.1	6190.6	5269535.6
607	112.1	125577.3	4709.0	5274244.5
608	84.0	125661.3	3528.0	5277772.5
609	49.8	125711.0	2089.8	5279862.3
610	17.8	125728.8	749.2	5280611.5
611	1.7	125730.6	72.8	5280684.3


6 A.M.
7
8
9
10
11
NOON
1
2
3
4
5
6 P.M.
7
8
9
10
11
MIDNIGHT
1
2
3
4
5
GRAPHIC CONTROLS CORPORATION
BUFFALO, NEW YORK
02/15/08
Loca Hills 65F
BOP # 3 RT 15-09/54
Loca Hills #3 Leeward USA #3
1-22-13S-32E
LS Bus Sm. #4
GS North
John Harlow
John Hailes Ltw
Casing Test
BOP in place when tested

Wildcat Measurement

Calibration Certificate

Pressure Recorder

Serial Number: 6068

Pressure Range 1000# **p.s.i. accuracy +/-** 0.2% **% Full Scale**_____ **p.s.i.**_____

Increasing Pressure			Decreasing Pressure		
Applied Pressure	*Indicated Pressure*	*Difference*	*Applied Pressure*	*Indicated Pressure*	*Difference*
0.0#	0.0#	0.0#	800.0#	800.0#	0.0#
100.0#	100.0#	0.0#	600.0#	600.0#	0.0#
300.0#	300.0#	0.0#	400.0#	400.0#	0.0#
500.0#	500.0#	0.0#	200.0#	200.0#	0.0#
700.0#	700.0#	0.0#	0.0#	0.0#	0.0#
1000.0#	1000.0#	0.0#			

Calibrated By: Crystal **Gauge** **Deadweight**_____

This Is To Certify That This Recorder Has Been Inspected And Tested.

Remarks_____

Date Of Calibration 07-21-2005 **Inspector**

Bus: (432) 683-3033
Fax: (432) 570-5253

2⅞ (SIZE) used 6.5# (WEIGHT)

T&C (GRADE) EUE (COUPLING)

MIDLAND
pipe
&
equipment

P.O. Box 8715
Midland, Tx 79708-8715

9-15-16 (DATE)

PAGE 1 OF 1 PAGE(S)

Tu. 19

Tu Ft 599.70'	From/Stock of Midland Pipe & Equip	Shipped To Loco Hills Ice Storage Loco Hills, N.M.	Trucking Co. MIDE
Part of			

19 jts 599.70' - 2⅞ 6.5# T&C used WF
Issue T&C Tbg

1	JT#	FEET	TOTAL	JT#	FEET	TOTAL	JT#	FEET	TOTAL
	1	32.90	32.90						
	2	32.00	64.90						
	3	32.00	96.90						
	4	31.60	128.50						
	5	33.00	161.50						
	6	31.40	192.90						
	7	31.30	224.20						
	8	30.80	255.00						
	9	30.90	285.90						
	10	28.80	314.70						
	11	29.20	343.90						
	12	31.80	375.70						
	13	32.00	407.70						
	14	31.60	439.30						
	15	32.10	471.40						
	16	31.80	503.20						
	17	31.60	534.80						
	18	31.80	566.60						
	19	33.10	599.70						

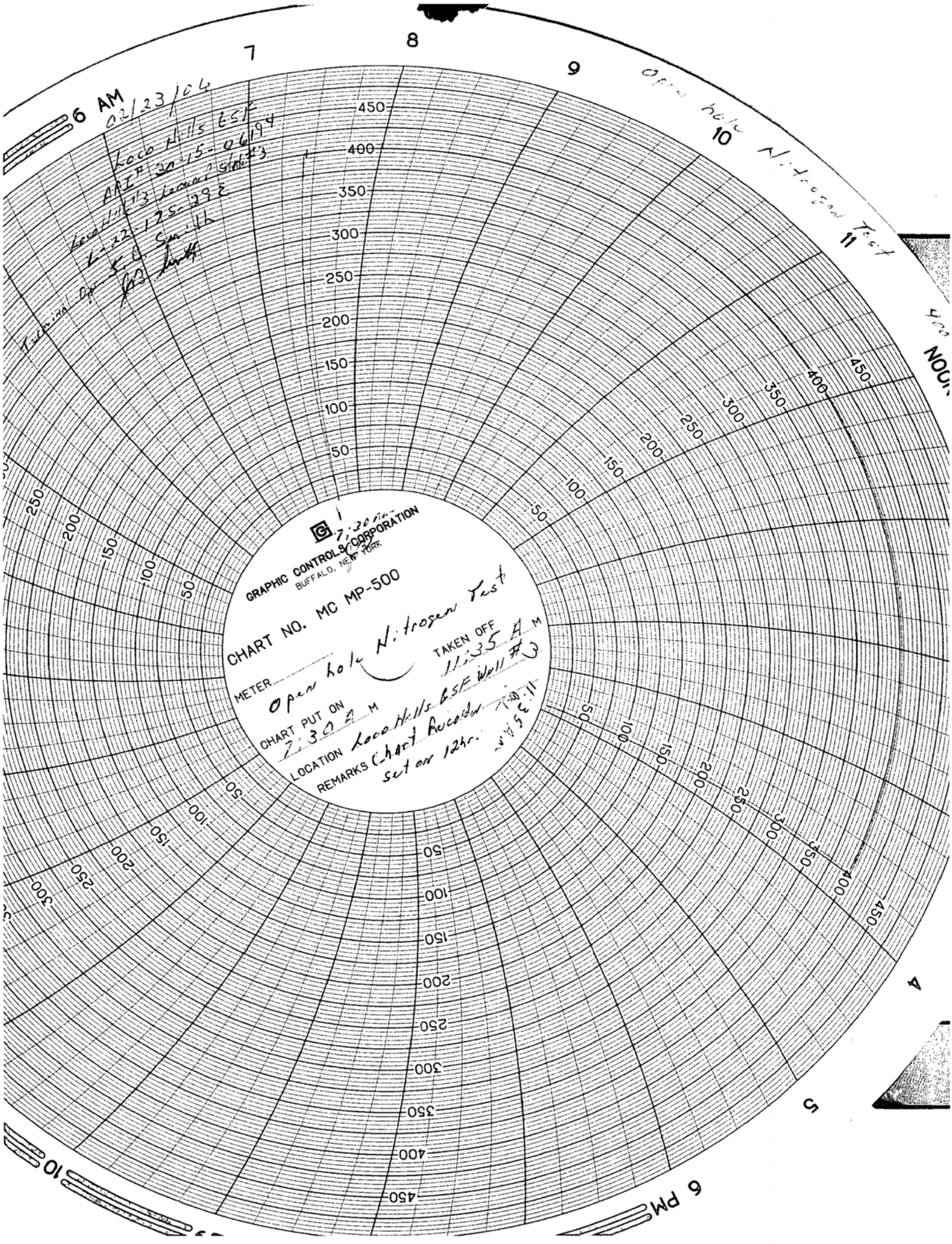
5.93' + 4' pup joint sub

MIDLAND PIPE & EQUIPMENT
P.O. BOX 8715
MIDLAND, TEXAS 79708
(432) 683-3033

NEW LIMITED SERVICE/REJECT AND USED MATERIALS ARE SOLD "AS IS, WITHOUT WARRANTY OF MERCHANTABILITY OR FITNESS" ALL SALES MADE IN MIDLAND CO. TX. AND REMAIN THE PROPERTY OF MIDLAND PIPE UNTIL PAID IN FULL.

DRIVER

PURCHASER


02/23/04
Loco Hills 6SE
API# 30-15-06194
Location: Unit G Sec 13 T18S R29E
Eddy Co. NM
Testing Co. - S.E. Sm. Lt
6 AM
7
8
9
10
11
NOON
4
5
6 PM
10
GRAPHIC CONTROLS CORPORATION
BUFFALO, NEW YORK
CHART NO. MC MP-500
METER Open hole N. Itrogen Test
CHART PUT ON 7:30 A M
TAKEN OFF 11:35 A M
LOCATION Loco Hills 6SE Well #3
REMARKS (Chart Recorder Test)
Set on 12hr.
450
400
350
300
250
200
150
100
50

Wildcat Measurement

Calibration Certificate

Pressure Recorder

Serial Number: 265-50140

Pressure Range 500# **p.s.i. accuracy +/-** 0.2 **% Full Scale** _____ **p.s.i.** _____

Increasing Pressure			Decreasing Pressure		
Applied Pressure	*Indicated Pressure*	*Difference*	*Applied Pressure*	*Indicated Pressure*	*Difference*
0.0#	0.0#	0.0	400#	400#	0.0
50#	50#	0.0	300#	300#	0.0
150#	150#	0.0	200#	200#	0.0
250#	250#	0.0	100#	100#	0.0
350#	350#	0.0	0.0#	0.0#	0.0
500#	500#	0.0			

Calibrated By: Crystal **Gauge** **Deadweight** _____

This Is To Certify That This Recorder Has Been Inspected And Tested.

Remarks _____

Date Of Calibration 02/21/2006 **Inspector** _____

JOB LOG

TICKET # 4228851	TICKET DATE 02/21/06		
REGION NORTH AMERICA LAND	NWA / COUNTRY Permain Basin / USA	BDA / STATE Midland	COUNTY EDDY	STATE NM
MBU ID / EMPL # OD22102/ 301905	H.E.S EMPLOYEE NAME F. Castillo	PSL DEPARTMENT P.E./ Stimulation		
LOCATION Odessa, Tx.	COMPANY Loco Hills	CUSTOMER REP JB Smith	PHONE 505.677.2331	
TICKET AMOUNT 10,310.00 / 9,919.60	WELL TYPE gas	API/UWI #		
WELL LOCATION Loco Hills N.M.	DEPARTMENT Nitrogen Services	JOB PURPOSE CODE 14104		
LEASE / WELL # Leonard State #3	SEC / TWP / RNG N/A			

Chart No.	Time	Rate (BPM)	Volume (BBL)(GAL)	Pmps T	Pmps C	Press.(PSI) Tbg	Press.(PSI) Csg	Job Description / Remarks
CST	08:45							ARRIVE ON LOCATION 02-21-06
	08:50							CONDUCT LOCATION ASSESSMENT SAFETY MEETING
	08:55							Spot & Set-up N2 Equip
09:50								Cool down
	10:15							Safety Meeting
	10:20				✓		1,000	TEST LINE
	10:26	300			✓		70	START N2
	10:31	300			✓		245	5 min N2
	10:33	400			✓		265	Increase N2 Rate
	10:41	400	5200		✓		305	15 min N2
	10:42	400	5800		✓		310	SHUT DOWN N2 WELL HEAD LEAK
	03:04	400			✓		130	START N2
	03:09	450	8,000		✓		210	5 min N2
	03:19	450	12,500		✓		240	15 min N2
	03:34	450	20,200		✓		260	30 min N2
	03:44	450	24,700		✓		300	40 min N2
	03:46	700	25,600		✓		350	Increase N2
	04:15	700	41,000		✓		480	SHUT DOWN
								20,20 scf Down Hole
								20,000 scf cool down
								40,000 scf N2 Total
								8 - hours on Loc

Submit 3 Copies To Appropriate District Office
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1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources

RECEIVED
JUN 18 2010
NMOCD ARTESIA

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-103
Revised March 25, 1999

WELL API NO. 30-15-06194
5. Indicate Type of Lease STATE ☑ FEE ☐
6. State Oil & Gas Lease No. BL-635

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.)

7. Lease Name or Unit Agreement Name: Leonard

1. Type of Well: Oil Well ☐ Gas Well ☐ Other Salt Dome Storage
2. Name of Operator: Lea Hills ESF LTD
8. Well No. Leonard State #3
3. Address of Operator: 1231 Old Anadarko Rd Aledo, Texas 76008
9. Pool name or Wildcat
4. Well Location
Unit Letter L : 1925 feet from the South line and 560 feet from the West line
Section 22 Township 17S Range 29E NMPM County Eddy
10. Elevation (Show whether DR, RKB, RT, GR, etc.)

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

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK ☐	PLUG AND ABANDON ☐	REMEDIAL WORK ☐	ALTERING CASING ☐
TEMPORARILY ABANDON ☐	CHANGE PLANS ☐	COMMENCE DRILLING OPNS. ☐	PLUG AND ABANDONMENT ☐
PULL OR ALTER CASING ☐	MULTIPLE COMPLETION ☐	CASING TEST AND CEMENT JOB ☐	
OTHER: ☐		OTHER: ☐	

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 Multiple Completions: Attach wellbore diagram of proposed completion or recompilation.

Sonar Well for capacity and configuration
MIT Test (min 300# for 30 min) chart recorded
If We can't get A good MIT Nipple up and notify OCD

Estimated start date June 22 2010

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

SIGNATURE John B Smith TITLE Terminal Operations DATE 6/18/10

Type or print name Telephone No.

(This space for State use)

APPPROVED BY Signed By Mike Bratcher TITLE Dist II DATE 6/18/10

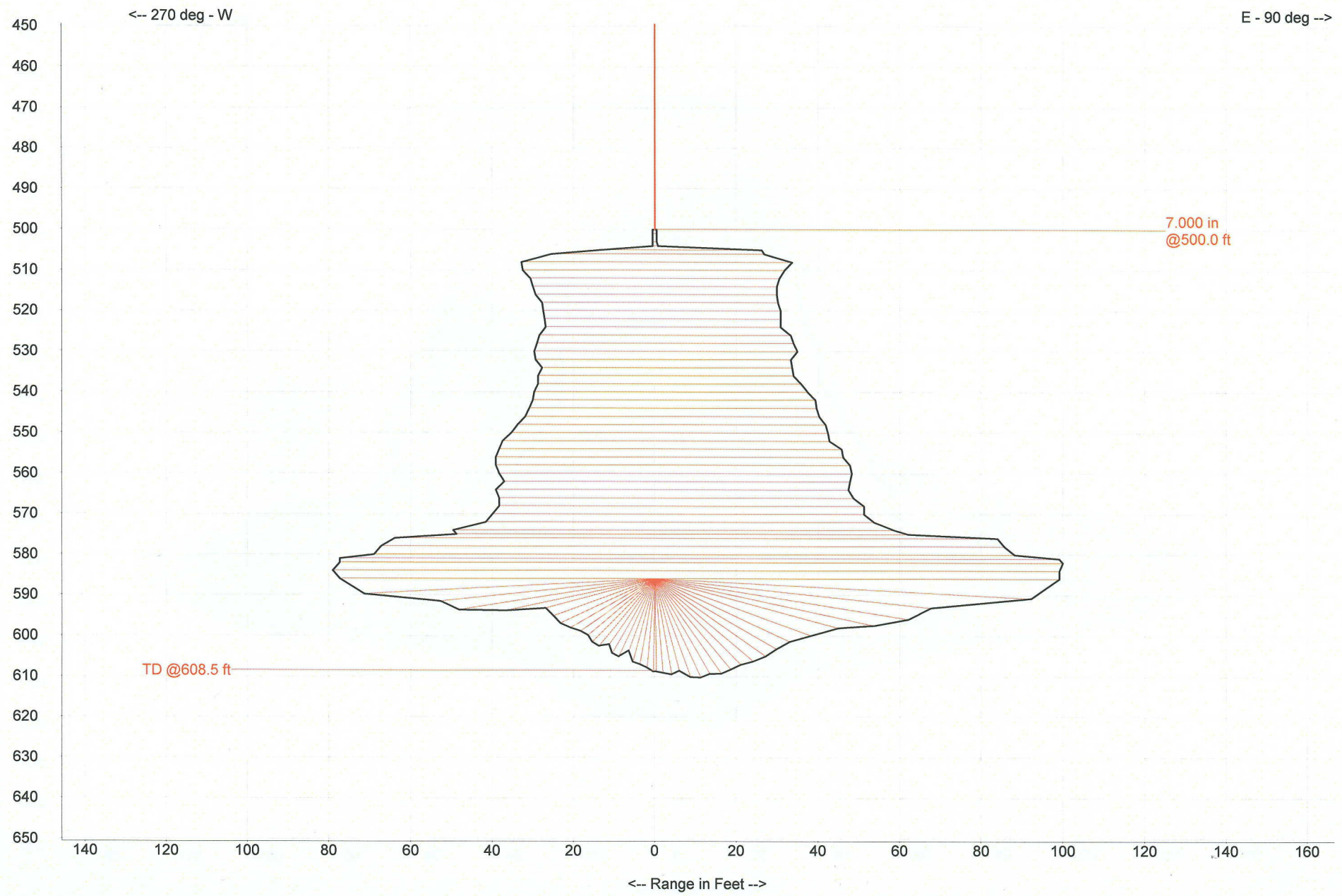
Conditions of approval, if any:
Notify OCD 24 Hrs. prior to running test

LOCO HILLS GSF
STORAGE WELL NO. 3

SONARWIRE GLOBAL, LLC

Vertical Cross Section

LOCO HILLS, NM
Tue, Jun 22, 2010

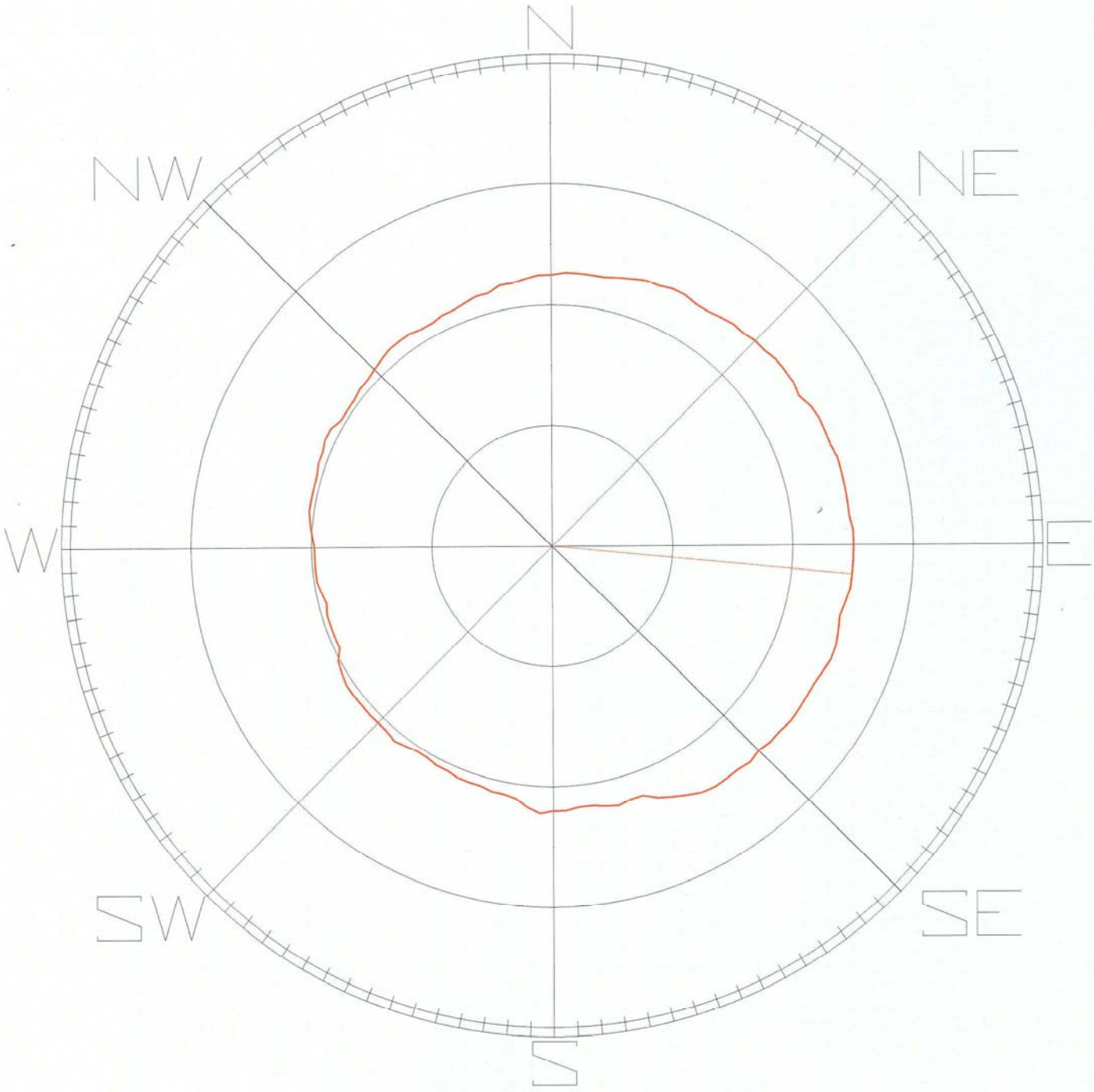


LOCO HILLS GSF
LOCO HILLS, NM
STORAGE WELL NO. 3

SONARWIRE GLOBAL, LLC

Max Range vs Bearing

Max Radius=100.0 ft @ 95.6 deg
Depth= 584 ft. Tue, Jun 22, 2010



1 inch = 50.0 ft.

160 140 120 100 80 60 40 20 0 20 40 60 80 100 120 140 160