

Order Number

467

API Number

30-025-40078

Operator

Apache Corporation

County

Lea

Order Date

6-28-11

Well Name

Dayton Hardy

Number

9

Location

I

UL

20

Sec

215

T (+Dir)

37E

R (+Dir)

Oil %

9%

Gas %

61%

Pool 1

60240

Tubb O+G

Pool 2

19190

Drinkard

74%

35%

Pool 3

62700

Wantz - Abo

17%

4%

Pool 4

Comments:

Posted to RBDMS 6-28-11 COH

DOWNHOLE COMMINGLE CALCULATIONS:

30-025-40078

OPERATOR: Apache Corporation

DHC-HOB-467

PROPERTY NAME: Dayton Hardy

WNULSTR: 9-I-20-215-37E

SECTION I:

POOL NO. 1 Tubb O+G, (Oil)

ALLOWABLE AMOUNT

142 284 MCF

POOL NO. 2 Drinkard

142 852 MCF

POOL NO. 3 Wantz-Abo

187 1122 MCF

POOL NO. 4 _____

POOL TOTALS 471 2258 MCF

SECTION II:

POOL NO. 1 Tubb O+G (Oil)

Oil
9%

Gas
61%

POOL NO. 2 Drinkard

74%

35%

POOL NO. 3 Wantz-Abo

17% x 471 = 80.07

4%

POOL NO. 4 _____

<80>

OIL

GAS

SECTION III:

17% ÷ 187 = 1100

SECTION IV:

9% x 1100 = 99

<99>

74% x 1100 = 814

<814>

17% x 1100 = 187

<187>

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

Form C-103

June 19, 2008

HOBBS OCD

OIL CONSERVATION DIVISION

1220 South St. Francis Dr.

Santa Fe, NM 87505

JUN 27 2011

RECEIVED

WELL API NO.

30-025-40078

5. Indicate Type of Lease

STATE ☐ FEE ☒

6. State Oil & Gas Lease No.

7. Lease Name or Unit Agreement Name

Dayton Hardy

8. Well Number 009

9. OGRID Number

873

10. Pool name or Wildcat

Bli O&G(Oil)/Tubb O&G(Oil)/Drk/Wantz; Abo

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:

2. Name of Operator

Apache Corporation

3. Address of Operator

303 Veterans Airpark Lane, Suite 3000 Midland, TX 79705

4. Well Location

Unit Letter I : 1331 feet from the South line and 467 feet from the East line

Section 20 Township 21S Range 37E NMPM County Lea

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

3488' GR

12. 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 ☐ MULTIPLE COMPL ☐

DOWNHOLE COMMINGLE ☒

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐

COMMENCE DRILLING OPNS. ☐ P AND A ☐

CASING/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.

Apache would like to DHC the following pools:

R-11363

Pool Names:

Tubb Oil & Gas (Oil)

60240

Perforations:

Tubb 6205'-6300'

Drinkard

19190

Drinkard 6614'-6721'

Wantz; Abo

62700

Abo 6870'-6941'

The allocation method will be as follows based on offset production. (See attached application for exception to Rule 303-C.)

	OIL	GAS	WATER
Tubb	9%	61%	9%
Drinkard	74%	35%	78%
Abo	17%	4%	13%

Downhole commingling will not reduce the value of these pools. Ownership is the same for each of these pools.

Spud Date: 04/25/2011

Rig Release Date: 05/02/2011

DHC-HOB-467

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

SIGNATURE

Reesa Holland

TITLE Sr. Engr Tech

DATE 05/31/2011

Type or print name Reesa Holland

E-mail address: Reesa.Holland@apachecorp.com

PHONE: 432/818-1062

For State Use Only

APPROVED BY:

[Signature]

TITLE PETROLEUM ENGINEER

DATE

JUN 28 2011

Conditions of Approval (if any):



May 31, 2011

**Mr. Paul Kautz
New Mexico Oil Conservation Division
1625 N French Drive
Hobbs, New Mexico 88240**

**RE: Application for Exception to Rule 303-C – Downhole Commingling
Dayton Hardy #9 API 30-025-40078
Unit I, Section 20, T21S, R37E
Tubb Oil & Gas (Oil) 60240; Drinkard 19190 & Wantz; Abo 62700
Lea County, New Mexico**

Dear Mr. Kautz,

Enclosed please find form C-103 and attachments for downhole commingling the captioned well. The ownerships (WI, NRI and ORRI) of these pools are identical in this wellbore. The fluids from each of these pools are compatible as seen in other similar commingles in the area. Combining these fluids will not result in any damage to these pools. Commingling will improve the efficiency of present and future recovery operations. Cross flow will not be a problem due to having a production lift system capable of keeping the well pumped off thereby maximizing production. This commingling will not reduce the value of the total remaining production.

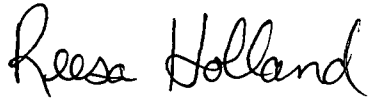
The allocation method used for this well was determined by analyzing the cumulative oil, gas and water production in a nine section area of review surrounding this well. Supporting documentation is shown on the attached spreadsheet. Production for active and inactive wells was grouped by pool in the area of review. The totals for each phase were then divided by the number of wells associated with this pool yielding an average. This average was used to determine the percentage allocation.

The main reason for using this method is based on economics and minimizing reservoir damage. Past completion practices had all three zones perforated and fracture stimulated during one full week. Each zone was isolated by a retrievable bridge plug to allow for production testing of each zone for allocation purposes. This testing period lasted as long as one month before a stabilized rate was observed thus allowing the next zone to be brought on and tested. During this time period the completion fluids used were still confined to the other reservoirs causing gel damage. It is a common practice to get these fluids out of the wellbore as soon as possible to help maximize productivity. On a cost basis it is more expensive to have a completion rig move in and out multiple times to bring on each new zone. Several other factors such as weather, other new completions and regulatory well work may interfere with these new wells.

The area of review used encompasses what has been accepted as a good statistical representation for allocation purposes. By using this allocation method all zones will be brought online in a more effective and efficient manner. This will in turn generate a higher productive rate and quicker revenue streams not only for the operator but for the State of New Mexico too.

If you need additional information or have any questions, please give me a call at (432) 818-1062.

Sincerely,

A handwritten signature in black ink that reads "Reesa Holland". The script is cursive and fluid, with the first name "Reesa" and last name "Holland" clearly distinguishable.

**Reesa Holland
Sr. Engineering Technician**

DISTRICT I
1625 N. FRENCH DR., HOBBS, NM 88240

State of New Mexico
Energy, Minerals and Natural Resources Department

HOBBS OCD

Form C-102

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

OIL CONSERVATION DIVISION

11885 SOUTH ST. FRANCIS DR.
Santa Fe, New Mexico 87505

JUN 27 2011

Revised October 12, 2005
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

DISTRICT III
1000 RIO BRAZOS RD., AZTEC, NM 87410

DISTRICT IV
11885 S. ST. FRANCIS DR., SANTA FE, NM 87505

WELL LOCATION AND ACREAGE DEDICATION PLAT

RECEIVED

☐ AMENDED REPORT

API Number 30-025-40078	Pool Code 60240	Pool Name Tubb Oil and Gas (oil)
Property Code 306597	Property Name DAYTON HARDY	Well Number 9
OGRID No. 873	Operator Name APACHE CORPORATION	Elevation 3488'

Surface Location

UL or lot No. 1	Section 20	Township 21-S	Range 37-E	Lot Idn	Feet from the 1331	North/South line SOUTH	Feet from the 467	East/West line EAST	County LEA
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Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres 40	Joint or Infill	Consolidation Code	Order No. NSL-6342-A						

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

GEODETIC COORDINATES NAD 27 NME SURFACE LOCATION Y=533239.3 N X=856480.7 E LAT = 32.460682° N LONG. = 103.177593° W LAT. = 32°27'38"N LONG. = 103°10'39"W	OPERATOR CERTIFICATION I hereby certify that the information herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division. <i>Sorina L. Flores</i> 3/2/11 Signature Date Sorina L. Flores Printed Name SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief. DECEMBER 20, 2010 Date Surveyed DSS Signature & Seal of Professional Surveyor <i>Ronald J. Eidson</i> 01/07/2011 10.11.1852 Certificate No. GARY G. EIDSON 12641 RONALD J. EIDSON 3239
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1625 N. FRENCH DR., HOBBS, NM 88240

State of New Mexico
Energy, Minerals and Natural Resources Department

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WELL LOCATION AND ACREAGE DEDICATION PLAT

RECEIVED

☐ AMENDED REPORT

API Number 30-025-40078	Pool Code 19190	Pool Name Drinkard
Property Code 306597	Property Name DAYTON HARDY	Well Number 9
OGRID No. 873	Operator Name APACHE CORPORATION	Elevation 3488'

Surface Location

UL or lot No	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
1	20	21-S	37-E		1331	SOUTH	467	EAST	LEA

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres 40	Joint or Infill	Consolidation Code	Order No. USL-6342 A						

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State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION
11885 SOUTH ST. FRANCIS DR.
Santa Fe, New Mexico 87505

HOBBS OGD

JUN 27 2011

Form C-102

Revised October 12, 2005

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WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number 30-025-40078	Pool Code 62700	Well Number 9
Property Code 306597	Property Name DAYTON HARDY	Well Number 9
OGRID No. 873	Operator Name APACHE CORPORATION	Elevation 3488'

Surface Location

UL or lot No. 1	Section 20	Township 21-S	Range 37-E	Lot Idn	Feet from the 1331	North/South line SOUTH	Feet from the 467	East/West line EAST	County LEA
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Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres 40	Joint or Infill	Consolidation Code	Order No. NSL-6342-A						

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Lease Name	Well Number	10DIGITARI	Location	Tubb	Drinkard	Abo	Tubb	Drinkard	Abo	Tubb	Drinkard	Abo
STATE DA	1	3002506615	16L 21S 37E C NW SW		193533			417151				6013
STATE DA	2	3002506616	16K 21S 37E		196029			1534877				3542
STATE DA	3	3002506617	16I 21S 37E			5165						
STATE DA	5	3002506618	16J 21S 37E	33803	137311		3592486	1776192				968
STATE DA	4	3002506619	16I 21S 37E C NE SE		159005			2309092				573
HARRY LEONARD NCT E	1	3002506620	16G 21S 37E C SW NE		38352			729087				403
HARRY LEONARD NCT E	2	3002506621	16H 21S 37E		158744			1409874				3476
HARRY LEONARD NCT E	3	3002506622	16B 21S 37E C NW NE		126435			2447814				8141
HARRY LEONARD NCT E	4	3002506623	16A 21S 37E NE NE	19698	60780		6447223			788		
HARRY LEONARD NCT E	5	3002506624	16H 21S 37E SE SE NE		25103	1397		1173015	16468		71609	29
STATE C TR 12	3	3002506625	16E 21S 37E SW NW		190002			599737				5774
STATE C TRACT 12	4	3002506626	16F 21S 37E	18900	212061		434872	2310967		19325	17524	
STATE C TR 12	6Y	3002506627	16C 21S 37E	24046			4884987			2329		
STATE C TR 12	6Y	3002506628	16C 21S 37E	21780	191900		4250015	1468633		1942	8898	
STATE C TRACT 12	7	3002506629	16D 21S 37E		234226			1016441			62687	
STATE LAND 15	1	3002506630	16M 21S 37E C SW SW		222695			1527048			68180	
STATE LAND 15	2	3002506631	16N 21S 37E C SE SW		180687			1575008			16287	
STATE LAND 15	3	3002506632	16O 21S 37E C SW SE	130	251184		1985	6727			90	
STATE LAND 15	4	3002506633	16P 21S 37E C SE SE	22356	219483		6485465	2052521		2666	59153	
STATE LAND 15	5	3002506634	16P 21S 37E	397		52519	6247		60199	1738		21503
MITTIE WEATHERLY	1	3002506635	17F 21S 37E		284651			1534360			25507	
LOCKHART A 17	2	3002506637	17I 21S 37E		128919			47881			30	
LOCKHART A 17	3	3002506638	17H 21S 37E		147030			629007			13515	
LOCKHART A 17	4	3002506639	17A 21S 37E NE NE	25219	126170		272576	933316		390	2007	
LOCKHART	1	3002506640	17L 21S 37E	78540	39619		708057			2001		
LOCKHART	2	3002506641	17M 21S 37E	5566	102028		135482	839756		1032	6219	
WEATHERLY	65	3002506642	17B 21S 37E NE NW NE	21343	267674		335277	1307116		2643	2906	
HARDY BLINEBRY UNIT	3	3002506643	17N 21S 37E		103827			77883			167	
W W WEATHERLY	2	3002506645	17J 21S 37E NW SE		207562			830725			3595	
W W WEATHERLY	3	3002506646	17G 21S 37E C SW NE	23670	115000		545556	250835		156987	3061	
W W WEATHERLY	4	3002506647	17K 21S 37E NE NE SW		127249			796780			141399	
MITTIE WEATHERLY	2	3002506648	17E 21S 37E	19595	15747		177411			1545		
MITTIE WEATHERLY	3	3002506649	17C 21S 37E C NE NW		68468			252825			7763	
HARDY BLINEBRY UNIT	1	3002506652	17P 21S 37E		65420							
HARDY BLINEBRY UNIT	2	3002506653	17O 21S 37E		99502		87783					
STATE DC	1	3002506663	19F 21S 37E		43067			483382			23202	
L G WARLICK A	1	3002506664	19I 21S 37E		57345			629754			12430	
L G WARLICK	1	3002506665	19H 21S 37E		87728			197597			4556	
L G WARLICK A	2	3002506666	19J 21S 37E		74934			998936			22251	
GRAHAM STATE NCT I	1	3002506668	19 21S 37E		298132			963579			34062	
L G WARLICK	1	3002506669	19A 21S 37E									
STATE CK	1	3002506672	19N 21S 37E		207801			1252675			169892	
STATE CK	2	3002506673	19K 21S 37E		267765			858011			199300	
HARDY	2	3002506674	19P 21S 37E		115177			772483			5625	
HARDY	5	3002506677	19O 21S 37E									
J G RANDLE	1	3002506680	20G 21S 37E		60184			1105410			238	
J G RANDLE A	1	3002506681	20F 21S 37E		162131			645156			69172	
C L HARDY	2	3002506685	20N 21S 37E SE SE SW		277860			494616			115518	
C L HARDY	3	3002506686	20K 21S 37E		151807			593524			10359	
C L HARDY	5	3002506687	20L 21S 37E C NW SW		127573			1096899			8619	
DAYTON HARDY	2	3002506688	20I 21S 37E	4347	126786		59998	466116		9852	4553	
DAYTON HARDY	3	3002506689	20J 21S 37E C NW SE		132494			410107			5751	
D C HARDY	3	3002506690	20P 21S 37E SE SE		197507			1469346			23674	
D C HARDY	4	3002506691	20O 21S 37E S2 SW SE	19377	366593		8848	2105781		30539	109170	
ELLIOTT B	1	3002506692	20D 21S 37E		114405			329823			14162	
J G RANDLE	1	3002506693	20E 21S 37E		190196			1478868			25499	
D C HARDY	5	3002506694	20P 21S 37E NW SE SE									
ANDERSON	1	3002506695	21I 21S 37E	11180	12736	17232	1716739	765152	83181	789	19125	68262
ANDERSON	1	3002506696	21I 21S 37E C NE SE	11087	229729		1515766	1325559		780	3308	
M E WANTZ	8	3002506697	21O 21S 37E			63712			153411			16573
M E WANTZ	4	3002506698	21J 21S 37E	35400		38048	3660587			1183		
M E WANTZ	7	3002506699	21N 21S 37E			161157			272493			48288
M E WANTZ	5	3002506700	21K 21S 37E		21260	5663		1575369			12714	
M E WANTZ	12	3002506701	21M 21S 37E		90040			1533772			9506	
M E WANTZ	11	3002506702	21L 21S 37E		100753			235800			27018	
M E WANTZ	9	3002506703	21J 21S 37E NW SE	33714	91424		3570968	280091		1110	5861	
M E WANTZ	10	3002506704	21K 21S 37E	24029	79084		1050685	77685			3111	
C L HARDY	4	3002506705	20M 21S 37E C SW SW		101578							
M E WANTZ	1	3002506706	21N 21S 37E									
M E WANTZ	3	3002506707	21P 21S 37E									
M E WANTZ	6	3002506709	21M 21S 37E			262790						
MARY E WANTZ	1	3002506713	21N 21S 37E		152796			576458			102	
MARY E WANTZ	2	3002506714	21S 21S 37E		23892			168308			97	
MARY E WANTZ	3	3002506715	21P 21S 37E		227608			778805			22295	
ELLIOTT A	1	3002506716	21A 21S 37E C NE NE	5448	327940		85696	4127861		15894	23520	
ELLIOTT A	2	3002506717	21H 21S 37E C SE NE	33724	173693		2512828	1920141		946	15045	
ELLIOTT A	3	3002506718	21A 21S 37E			4595						
ELLIOTT A	4	3002506719	21H 21S 37E			82148						
WEATHERLY	2	3002506720	21D 21S 37E		187362			680323			5598	
WEATHERLY	3	3002506721	21C 21S 37E		173489			1789018			3616	
WEATHERLY	4	3002506722	21B 21S 37E		231716			2107816			8465	
WEATHERLY	5	3002506723	21E 21S 37E		179281			1239325			357	
WEATHERLY	6	3002506724	21F 21S 37E		171872			1453076			6706	
WEATHERLY	7	3002506725	21G 21S 37E	1309	156388		144291	1552975		2551	5493	
WEATHERLY E	1	3002506726	21G 21S 37E	58350			7653840					
UNIT	125	3002506813	28O 21S 37E		175867			325953			221	
J N CARSON NCT A	10	3002506816	28J 21S 37E NW SE									

Lease Name	Well Number	10DIGITAPI	Location	Tubb	Drinkard	Abo	Tubb	Drinkard	Abo	Tubb	Drinkard	Abo
J N CARSON NCT A	11	3002506817	28K 21S 37E NE NE SW			24998						
UNIT	115	3002506818	28K 21S 37E		164855			331234			1202	
UNIT	126	3002506831	28P 21S 37E	41810	122002		4674523	192467		1486	6444	
UNIT	113	3002506832	28I 21S 37E		254375			881419			52939	
J N CARSON NCT C	6	3002506833	28P 21S 37E SW SE SE									
J N CARSON NCT C	9	3002506836	28I 21S 37E									
UNIT	109	3002506840	28E 21S 37E		208446			358269			365	
UNIT	110	3002506841	28F 21S 37E		235030			1163855			750849	
UNIT	104	3002506842	28D 21S 37E SW NW NW		130085			622988			372924	
EUNICE KING	8	3002506844	28H 21S 37E C SE NE	4156	168965		35817			2389		
UNIT	111	3002506845	28G 21S 37E		204010			481132			3760	
EUNICE KING	10	3002506846	28B 21S 37E C NW NE									
UNIT	102	3002506847	28B 21S 37E NW NW NE		137428			231995			16952	
UNIT	401	3002506848	28A 21S 37E C NE NE		5397	574		585130	10217		230	723
EUNICE KING	13	3002506849	28A 21S 37E	15927	156657		5430287			332		
J N CARSON NCT A	9	3002506850	28K 21S 37E	4714			3152552			9210		
EUNICE KING	14	3002506851	28G 21S 37E NW SW NE	3820			486470			22848		
EUNICE KING	15	3002506852	28F 21S 37E SE SE NW			2603						
UNIT	101	3002506853	28A 21S 37E		81119			666792			199313	
EUNICE KING	18	3002506855	28E 21S 37E	6239			942488			658		
EUNICE KING	19	3002506856	28C 21S 37E C NE NW			13949						
LINAM	3	3002506859	29A 21S 37E SE NE NE	15727		3054	3288195			831		
UNIT	114	3002506861	28J 21S 37E	26982	334545		1696615	757999		254	356001	
UNIT	103	3002506862	28C 21S 37E	28458	461920		4952056	1334266			572826	
EUNICE KING	24	3002506864	28E 21S 37E		26754							
EUNICE KING	104	3002506865	28D 21S 37E SE NW NW	5659	179970	18528	350702			11091		
UNIT	112	3002506866	28H 21S 37E NW SE NE		136741			346048			435633	
UNIT	116	3002506867	28L 21S 37E		661008			1744837			1090709	
UNIT	123	3002506868	28M 21S 37E		234998			386801			264	
UNIT	124	3002506870	28N 21S 37E		542209			1130490			1087831	
E O CARSON	17	3002506871	28N 21S 37E SE SW	9385			1303109			6539		
E O CARSON	19	3002506873	28L 21S 37E	18581			3600039			7212		
E O CARSON	20	3002506874	28N 21S 37E			13257						
E O CARSON	22	3002506876	28L 21S 37E			7520						
UNIT	117	3002506877	29I 21S 37E	20694	152198		1954603	281274		531		
UNIT	118	3002506878	29J 21S 37E		262545			1012241			880593	
WILLIAM TURNER	3	3002506879	29I 21S 37E SE NE SE	20554		338	1867881		1077	346		314
UNIT	122	3002506880	29P 21S 37E C SE SE	27491	372998		2431548	1183026		1177	1586289	
UNIT	121	3002506881	29O 21S 37E		109623			876032				
TURNER	3	3002506882	29P 21S 37E	27027			2161687			321		
UNIT	165	3002506885	29A 21S 37E C SE SW		435636			581608			950124	
UNIT	164	3002506886	29M 21S 37E		134827							
UNIT	162	3002506888	29K 21S 37E	12191	250953		1185513	1370617			50824	
UNIT	158	3002506891	29E 21S 37E C NE NW	309	455258		5590	805876			106339	
HARDY	4	3002506892	29F 21S 37E		154340							
UNIT	160	3002506893	29E 21S 37E		200321			292884			4559	
UNIT	159	3002506894	29D 21S 37E		286285			438632			131505	
UNIT	108	3002506895	29H 21S 37E		295118			3233609			983008	
UNIT	107	3002506896	29G 21S 37E		200767			548572			2492	
D HARDY	3	3002506897	29H 21S 37E			655						
UNIT	105	3002506898	29G 21S 37E C NE NE		509436			969966			553409	
UNIT	106	3002506899	29F 21S 37E C NW NE		336566			886069			306150	
UNIT	120	3002506903	30C 21S 37E NE SE SE		629996			646095			152030	
UNIT	119	3002506904	30I 21S 37E		38025							
V M HENDERSON	2	3002506908	30A 21S 37E C NE NE									
V M HENDERSON	3	3002506909	30H 21S 37E SE NE		31111						6197	
V M HENDERSON	5	3002506911	30B 21S 37E C NW NE									
V M HENDERSON	6	3002506912	30C 21S 37E		30789			78492			10686	
V M HENDERSON	7	3002506913	30F 21S 37E		27561			173306			33410	
V M HENDERSON	8	3002506914	30E 21S 37E		11393			24194			2641	
V M HENDERSON	9	3002506915	30G 21S 37E	5064	24058		12285	89639		1864	10222	
V M HENDERSON	10	3002506916	30D 21S 37E		28459			157069			19371	
W E LEE	5	3002509920	20B 21S 37E									
W E LEE	3	3002509922	20C 21S 37E	9991	137716		97808	422827			3026	
A M YORK	2	3002509924	20A 21S 37E C NE NE	30845	229380		200056	883913		17429	23762	
A M YORK	1	3002509925	20H 21S 37E SE NE	2378	285241		615934	1383665		13031	2062	
UNIT	163	3002509935	29L 21S 37E NW NW SW		214411			594234			200375	
W E LEE	2	3002511520	20B 21S 37E	34579	199683		353489	614529		7051	3240	
GULF MATTERN	1	3002520004	30J 21S 37E	428	69466		5453	486924		807	108071	
GRAHAM STATE NCT I	2	3002520088	19L 21S 37E		40301			262464			4391	
STATE LAND 15	6	3002520311	16O 21S 37E SE SW SE		74023	67271		2338702	168449		30935	39472
L G WARLICK B	2	3002520368	19G 21S 37E		37198			1206068			8043	
STATE CK	3	3002520540	19N 21S 37E									
STATE DC	2	3002520583	19 21S 37E		45273			360346			32583	
SUNSHINE STATE	1	3002520776	19C 21S 37E		29526			243706			2501	
L G WARLICK	2	3002520777	19B 21S 37E		100449			527321			98382	
MATTERN	1	3002523494	30 21S 37E S2 NW SW									
MATTERN	2	3002523535	30K 21S 37E									
L G WARLICK	3	3002523953	18P 21S 37E		27704			249859			38167	
H T MATTERN NCT B	14	3002524022	30M 21S 37E C SW SW		88169			532812			304424	
H T MATTERN NCT B	15	3002524084	30N 21S 37E		5028			50987			2384	
H T MATTERN NCT B	18	3002524187	30O 21S 37E		63491			343559			143673	
UNIT	161	3002524415	29F 21S 37E SE NW	780	91175		73637	156405		3771	269085	
H T MATTERN NCT C	5	3002525025	18I 21S 37E E2 NE SE		16709	11808		1001260	105640		10325	17708
H T MATTERN NCT C	6	3002525099	18H 21S 37E		202660			1638304			227832	
H T MATTERN NCT C	7	3002525111	18J 21S 37E N2 NW SE		13975			172592			16893	
H T MATTERN NCT C	8	3002525112	18A 21S 37E E2 NE NE		39528	13759		741362	83125		22444	66261

Lease Name	Well Number	10DIGITAPI	Location	Tubb	Ornkard	Abo	Tubb	Drnkard	Abo	Tubb	Drnkard	Abo
UNIT	408	3002525184	28D 21S 37E		1947			1468839			4260	
HARRY LEONARD NCT E	6	3002525198	16A 21S 37E NE NE NE		21918			750803			7973	
UNIT	409	3002525212	28C 21S 37E SE NE NW		775			1112388			1805	
UNIT	411	3002525222	28B 21S 37E		3322			1157391			4264	
UNIT	412	3002525223	29D 21S 37E		108849			629859			89129	
UNIT	413	3002525224	29B 21S 37E		3258			613732			3425	
UNIT	414	3002525252	28H 21S 37E		1564			691410			24817	
UNIT	415	3002525253	28I 21S 37E		2262			2172421			2036	
UNIT	416	3002525262	28P 21S 37E		755			1258227			1050	
HARDY	6	3002525509	19O 21S 37E		27292			460453			51679	
UNIT	418	3002525515	29D 21S 37E SE NW SE		152678			2602099			1318753	
UNIT	417	3002525545	28K 21S 37E		72413			141296			1065432	
UNIT	424	3002525549	28L 21S 37E		9981			2059983			278341	
UNIT	423	3002525627	28N 21S 37E		455			3059070			3307	
UNIT	419	3002525694	28L 21S 37E		49189			373155			331119	
STATE E TRACT 27	1	3002526317	18N 21S 37E S2 SE SW		32446			117297			8925	
UNIT	425	3002526444	28G 21S 37E		242			1023682			2493	
UNIT	426	3002526445	29H 21S 37E		25103			1002277			270248	
UNIT	427	3002526446	29G 21S 37E		69989			205183			304659	
UNIT	432	3002526451	29P 21S 37E SE SE SE		11624			1869128			101966	
WILLIAM TURNER	4	3002527261	29J 21S 37E			95502			545306			11382
H T MATTERN NCT C	15	3002527529	18B 21S 37E		1180			2952			1110	
H T MATTERN NCT C	16	3002527530	18G 21S 37E		1755			6081			1198	
MITTIE WEATHERLY	6	3002528395	17E 21S 37E		51791			577767			82807	
CORDELIA HARDY	8	3002528900	29C 21S 37E									
UNIT	433	3002530418	29G 21S 37E SE NW SW		145722			145107			1358736	
I G WARLICK	4	3002533030	19A 21S 37E		16507			197996			53603	
V M HENDERSON	15	3002533328	30G 21S 37E NE SW NE									
MATTERN	4	3002533544	30J 21S 37E		184	754		163	4298		15	5148
V M HENDERSON	16	3002533782	30 21S 37E		376			747				
E O CARSON	24	3002534353	28M 21S 37E SW SW									
LINAM HARDY GAS COM	2	3002534355	29H 21S 37E SE NE									
STATE DC	3	3002534401	19F 21S 37E NE SE NW		30651	209		410899	438		224758	
I G WARLICK	5	3002534419	18O 21S 37E SW SE									
I G WARLICK A	3	3002534504	19I 21S 37E NE SE		7998	1574		123221	3014		376432	2424
STATE DC	4	3002534510	19 21S 37E		17118	840		68507	1115		163732	406
STATE CK	4	3002534776	19K 21S 37E SW NE SW									
MITTIE WEATHERLY	7	3002535745	17D 21S 37E SE NW NW			336			3158			17497
STATE C TRACT 12	14	3002536305	16D 21S 37E SE NW NW		11419		22188	150217			27609	
W H TURNER	3	3002537161	29K 21S 37E NE NE SW	1822			164764			9610		
STATE DA	12	3002537201	16J 21S 37E SE NW SE	2671	2069		53	64191		1008	866	
STATE C TRACT 12	21	3002537202	16C 21S 37E NE NE NW			10786			95217			37293
STATE LAND 15	9	3002537535	16O 21S 37E NE SW SE	586			11981					
STATE LAND 15	10	3002537536	16O 21S 37E SW SW SE	416			6736					
UNIT	434	3002537805	28B 21S 37E NW NW NE		9103			4685			50413	
H S TURNER	8	3002537873	29M 21S 37E NW SW SW	13601			186592			150776		
D C HARDY	9	3002538004	20O 21S 37E	1840	43403		6470	162557			59180	
W H TURNER	9	3002538126	29L 21S 37E SE NW SW	8538			86036			110888		
H S TURNER	10	3002538296	29N 21S 37E NE SE SW	6454			71109			60437		
D C HARDY	10	3002539342	20P 21S 37E SE SE SE	193	4629		14008	21014		375	12164	
D C HARDY	11	3002539637	20P 21S 37E	127	3099		6601	9905		581	18800	
TURNER	7	3002539691	29O 21S 37E	201			21796					
TOTALS				963,246	22,917,584	1,009,495	91,822,339	132,511,482	1,606,806	707,353	20,167,471	353,283
AVERAGES				15,791	134,809	31,547	1,457,497	844,022	94,518	14,147	130,113	22,080

Proposed Allocations	Oil	Gas	Water
Tubb	9%	61%	9%
Ornkard	74%	35%	78%
Abo	17%	4%	13%
TOTAL	100%	100%	100%



AFE No: PA- 11- 0209

Dayton Hardy #9
API #: 30-025-40078
1331' FSL & 467' FEL
Section 20, Township 21S, Range 37E
Lea County, New Mexico

Completion Procedure – Tubb-Drinkard-Abo

5 May 2011

Recommended Procedure:

Note: 5-1/2", 17#, J-55 & L-80 csg set @ 7250' w/1,095 sx cmt. (Circ 199 sx).
(978' of L-80 csg on top). PBTD @ +/-7206'.

Abo:

1. MIRU PU. Install BOP. Pressure test csg.
2. MIRU wireline unit. Run GR/CCL/CBL log from PBTD +/- 7206' to surface. Correlate to Weatherford Photo Density/Compensated Neutron/Spectral Gamma Ray log dated 5/2/11.
3. Perforate the Abo interval @ 6870' – 75', 82' – 87', 91', 97' – 99', 6903' – 06', 10' – 18', 30', 36' & 41' w/1 spf, 120 degree phasing. Total = 32 shots.
4. RIH w/2-7/8", 6.5#, J-55 tbg and pkr. Set pkr @ +/- 6800'. Load backside w/2% KCL and pressure to 500 psi.
5. Acidize Abo interval w/6,500 gals 20% HCL-NE-FE acid and ball sealers. Attempt to get 5-10 BPM rate with max treating pressure of 6,500 psi.
6. Release pkr & run thru perfs to knock off balls. Reset pkr @ 6800'.
7. Swab back load. Report results to Midland office.
8. Release pkr & POOH. Set a composite bridge plug (or CIBP w/35' cmt cap pending the Abo swab results) @ +/- 6840'.

Drinkard:

1. Perforate the Drinkard interval @ 6614', 21', 23', 25', 41', 49', 51', 53', 55', 67', 69', 71', 73', 75', 77', 81', 83', 89', 91', 93', 95', 97', 99', 6701', 05', 09', 15', 17', 19' & 21' w/2 spf, 120 degree phasing. (Total : 60 shots).
2. RIH w/2-7/8" tbg and pkr. Set pkr @ +/- 6500'.
3. Acidize the Drinkard interval w/3,000 gals 15% HCL-NE-FE BXDX acid and ball sealers.
4. Release pkr and run through perfs to knock off balls. POOH.
5. RU frac equipment. Pump 1 drum corrosion inhibitor followed by 10 bbl pad of 2% KCL. Pump 2 drums scale inhibitor and flush w/10 bbls 2% KCL.
6. Frac the Drinkard interval w/150,000# 20/40 SLC (or equivalent) resin coated sand down 5-1/2" csg @ 40 BPM in 35# XL gel as per frac recommendation.
7. Spot 1,000 gals 15% HCL from 6300' – 5300' during Drinkard frac flush.
8. RIH and set a composite bridge plug above the Drinkard interval @ +/- 6500'.

Dayton Hardy #9

Tubb:

1. Perforate the Tubb interval @ 6205', 11', 13', 15', 19', 48', 55', 57', 59', 61', 63', 73', 75', 86', 90' & 6300' w/2 spf, 120 degree phasing. (Total : 32 shots).
2. Spearhead 1,000 gals 15% HCL acid ahead of Tubb frac.
3. Pump 1 drum corrosion inhibitor followed by 10 bbl pad of 2% KCL. Pump 2 drums scale inhibitor and flush w/10 bbls 2% KCL..
4. Frac the Tubb interval w/80,000# 20/40 SLC (or equivalent) resin coated sand down 5-1/2" csg @ 40 BPM in 25# XL gel as per frac recommendation.
5. RIH w/2-7/8" tbg and bit. Drill out plug(s) and clean out to +/- 6800' PBTD (or 7200' if Abo is productive).
6. RIH w/2-7/8" production tubing. Land SN @ +/-6750' (or 7000' for Abo).
RIH w/1-1/2" pump & rods.
7. Install 640 PU.
8. Place well in test.

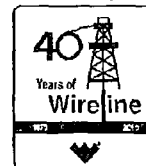


Weatherford®

Marked

PHOTO DENSITY COMPENSATED NEUTRON SPECTRAL GAMMA RAY

COMPANY APACHE CORPORATION
WELL DAYTON HARDY #9
FIELD EUNICE FIELD
PROVINCE/COUNTY LEA
COUNTRY/STATE U.S.A / NEW MEXICO
LOCATION 1331'FSL & 467'FEL
SEC 20, TWP 21S, RGE 37E

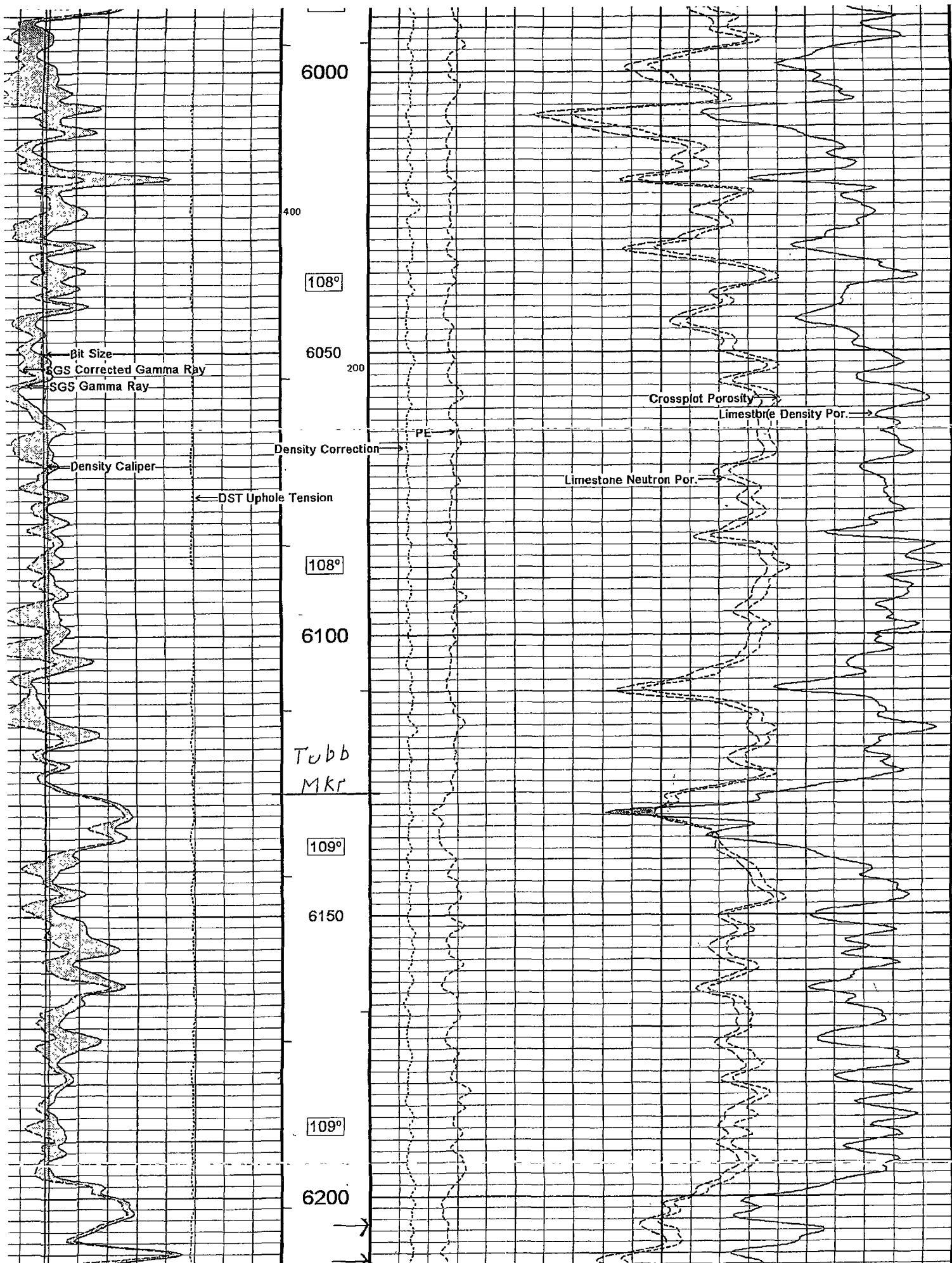


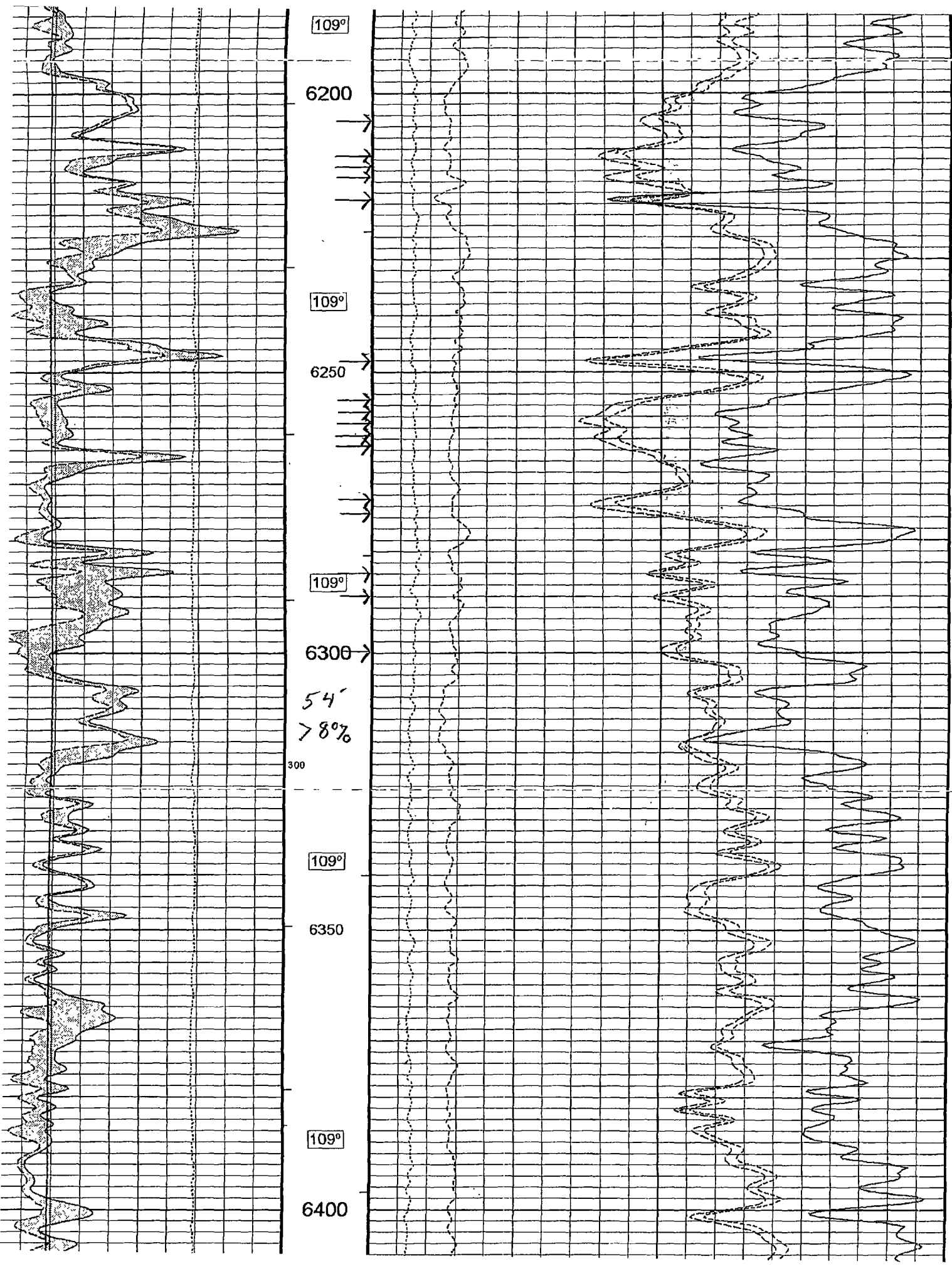
SEC 20	TWP 21S	RGE 37E	Other Services: DUAL LATEROLOG COMPENSATED SONIC
API Number 30-025-40078			MICRO LATEROLOG
Permit Number			

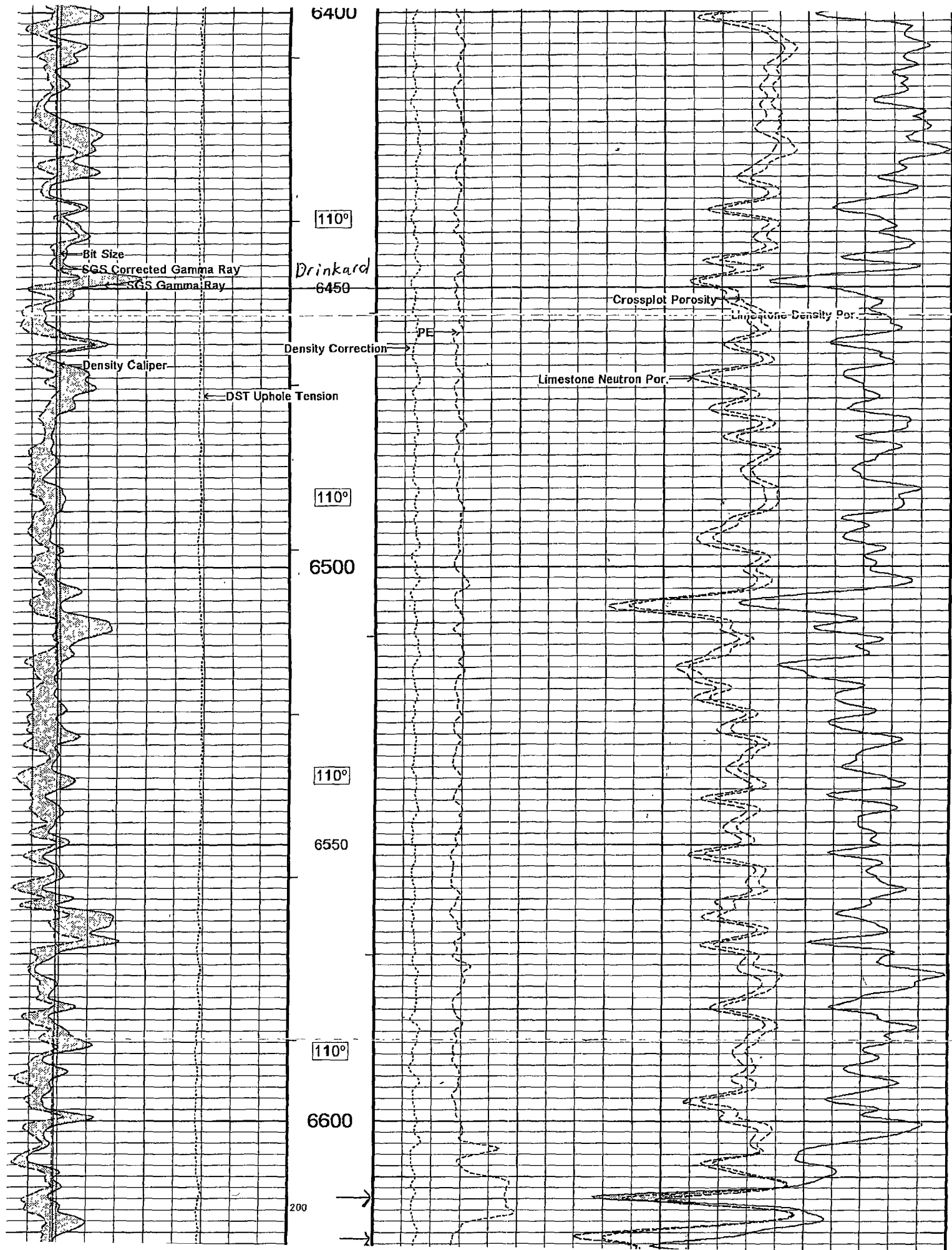
Permanent Datum G.L. Elevation 3488 feet	Elevations: feet
Log Measured From K.B. 11 FEET above Permanent Datum	KB 3499.00
Drilling Measured From K.B.	DF 3498.00
	GL 3488.00

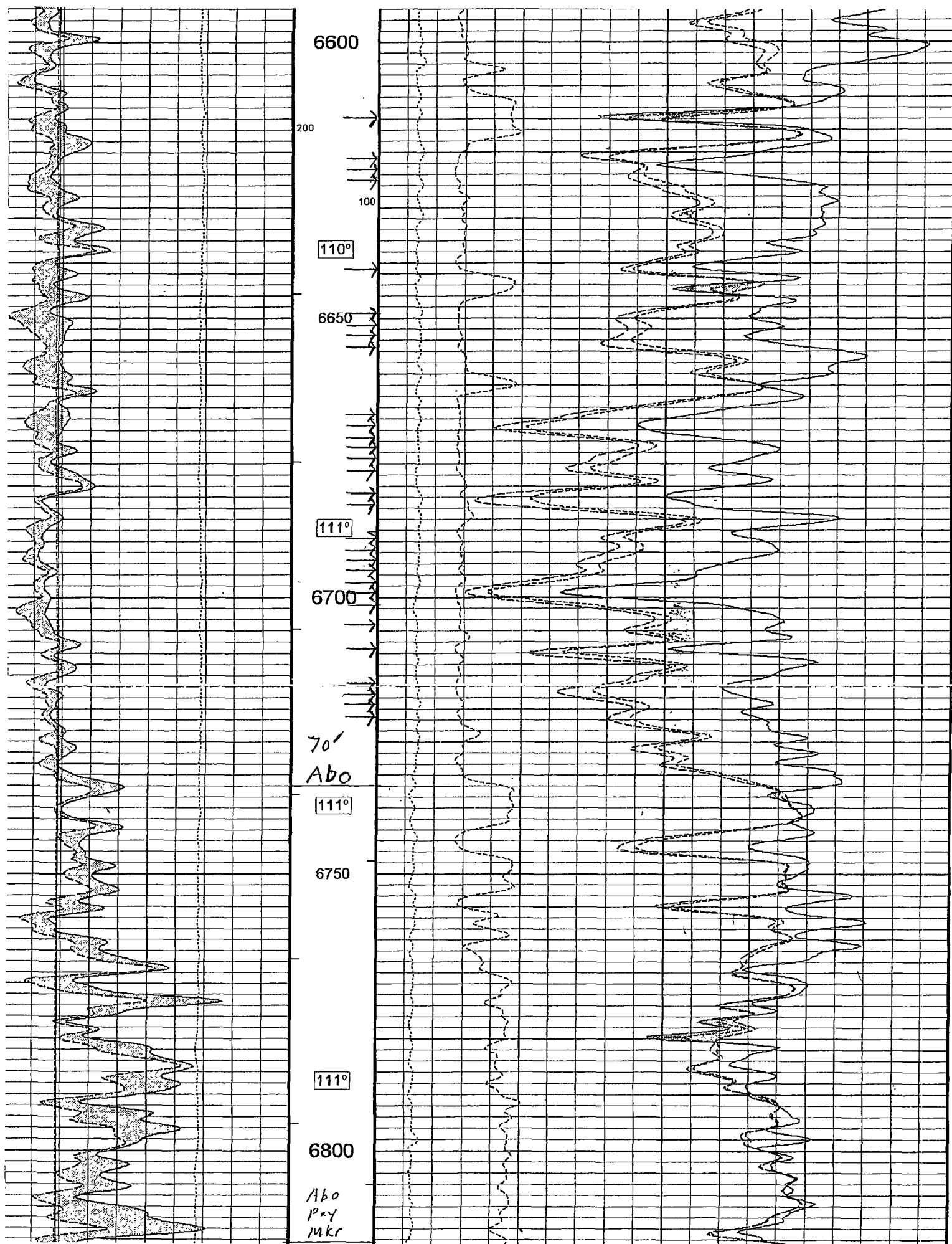
Date	02-MAY-2011		
Run Number	ONE		
Depth Driller	7250.00	feet	
Depth Logger	7241.00	feet	
First Reading	7195.00	feet	
Last Reading	100.00	feet	
Casing Driller	1308.00	feet	
Casing Logger	1308.00	feet	
Bit Size	7.875	inches	
Hole Fluid Type	BRINE		
Density / Viscosity	10.00 lb/USg	28.00	
PH / Fluid Loss	10.00		
Sample Source	FLOWLINE		
Rm @ Measured Temp	0.03 @ 75.0	ohm-m	
Rmf @ Measured Temp	0.02 @ 75.0	ohm-m	
Rmc @ Measured Temp	0.04 @ 75.0	ohm-m	
Source Rmf / Rmc	CALC	CALC	
Rm @ BHT	0.021 @ 111.0	ohm-m	
Time Since Circulation	8 HOURS		
Max Recorded Temp	111.00	deg F	
Equipment Name	COMPACT		
Equipment / Base	13072	ODESSA	
Recorded By	JASON GRIFFIN		
Witnessed By	ROBERT JOHNSON		

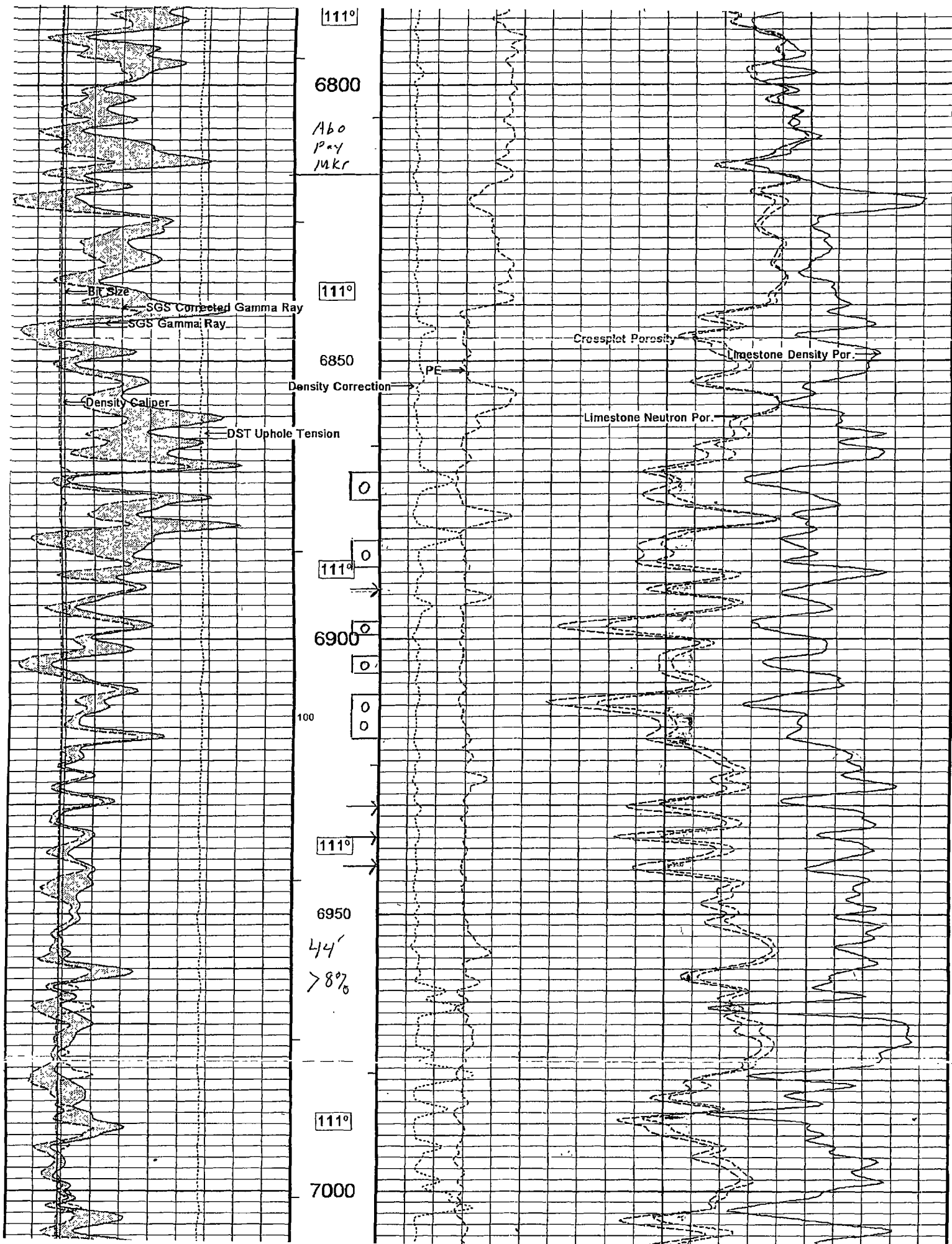
REMARKS











111°

7000

DC Hardy

#11

test

6990-7100

7/2/9

PA

111°

7050

fracture

8000, 15'

4.4/4650

Max 5000 ft

ISSO-4116

111°

7100

111°

7150

FR SGS Corrected Gamma Ray

FR Density Caliper

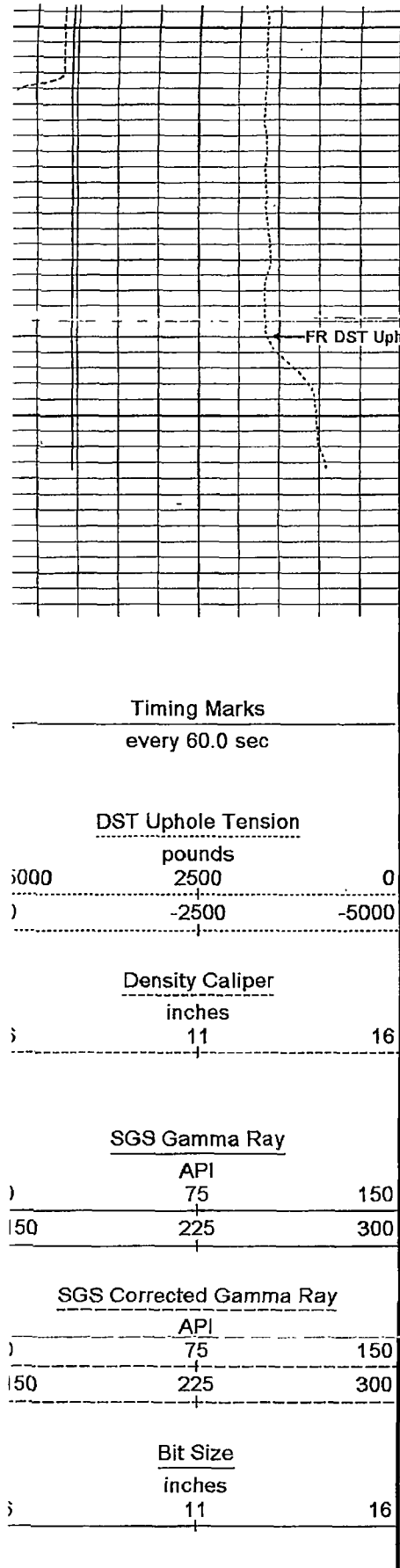
FR Density Correction

FR PE

FR Limestone Neutron Por.

FR Crossplot Porosity FR Limestone Density Por.

7200



7200

7250

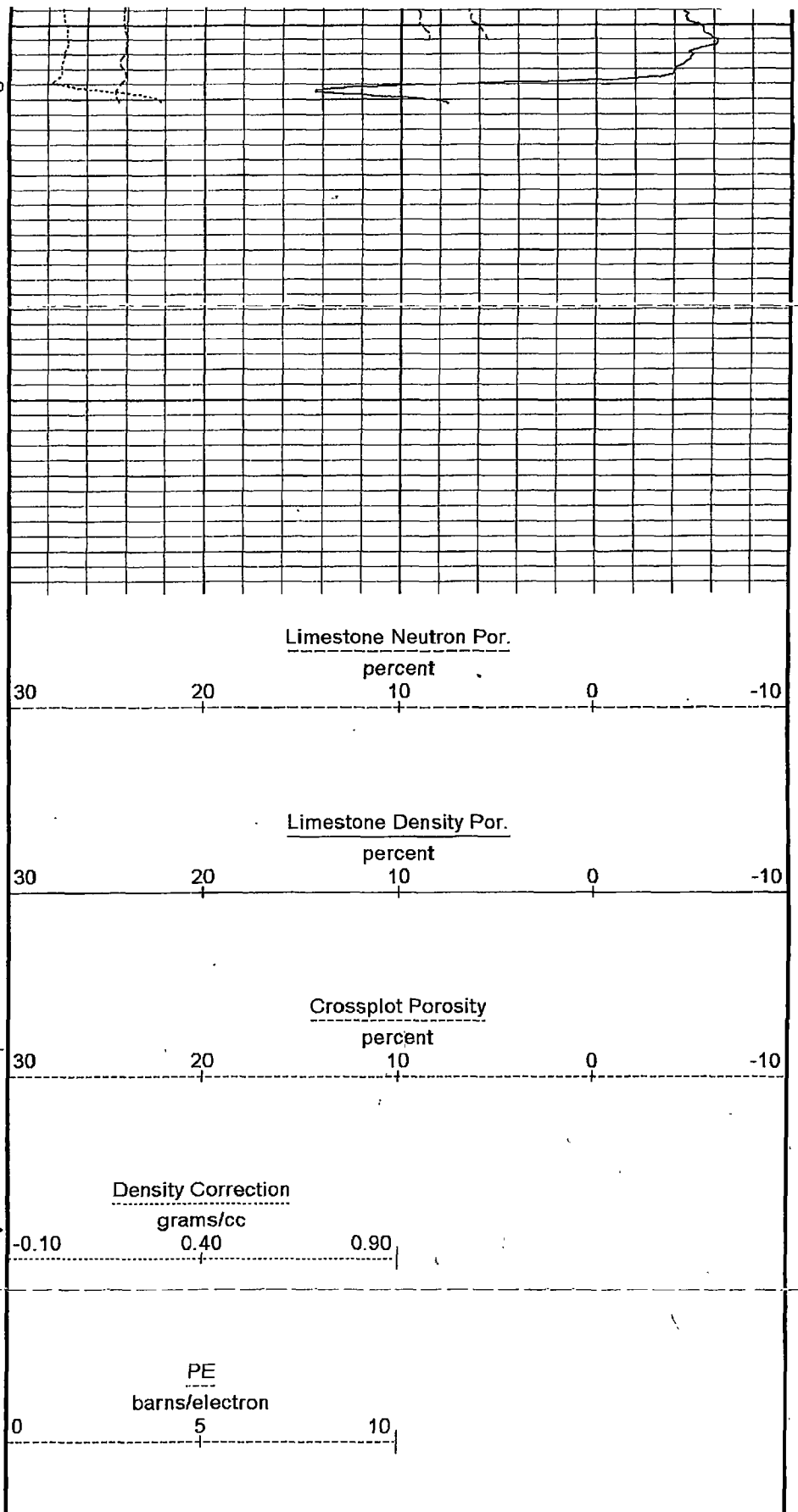
7274
Depth
in
Feet

Borehole
Temp in
deg F

HVI
every
10 cu ft

Annular
Integral
every
10 cu ft

Replay
Scale
1:240



Depth Based Data - Maximum Sampling Increment 10.0cm
Filename: C:\DOCUME~1\inmandg\LOCALS~1\Temp\Weatherford Pr...IDAYTON HARDY #9 MAIN.dta
System Versions: Logged with 11.02.2782 Plotted with 11.02.2164
Plotted on 02-MAY-2011 11:27
Recorded on 02-MAY-2011 04:27