



Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1113596
OIL & GAS CONSERVATION DIVISION

Form ACO-1
August 2013

Form must be Typed
Form must be Signed
All blanks must be Filled

WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # _____

Name: _____

Address 1: _____

Address 2: _____

City: _____ State: _____ Zip: _____ + _____

Contact Person: _____

Phone: (_____) _____

CONTRACTOR: License # _____

Name: _____

Wellsite Geologist: _____

Purchaser: _____

Designate Type of Completion:

- New Well Re-Entry Workover
- Oil WSW SWD SIOW
- Gas D&A ENHR SIGW
- OG GSW Temp. Abd.
- CM (Coal Bed Methane)
- Cathodic Other (Core, Expl., etc.): _____

If Workover/Re-entry: Old Well Info as follows:

Operator: _____

Well Name: _____

Original Comp. Date: _____ Original Total Depth: _____

- Deepening Re-perf. Conv. to ENHR Conv. to SWD
- Plug Back Conv. to GSW Conv. to Producer
- Commingled Permit #: _____
- Dual Completion Permit #: _____
- SWD Permit #: _____
- ENHR Permit #: _____
- GSW Permit #: _____

Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date
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API No. 15 - _____

Spot Description: _____

_____ - _____ - _____ Sec. _____ Twp. _____ S. R. _____ East West

_____ Feet from North / South Line of Section

_____ Feet from East / West Line of Section

Footages Calculated from Nearest Outside Section Corner:

- NE NW SE SW

GPS Location: Lat: _____, Long: _____
(e.g. xx.xxxxx) (e.g. -xxx.xxxxx)

Datum: NAD27 NAD83 WGS84

County: _____

Lease Name: _____ Well #: _____

Field Name: _____

Producing Formation: _____

Elevation: Ground: _____ Kelly Bushing: _____

Total Vertical Depth: _____ Plug Back Total Depth: _____

Amount of Surface Pipe Set and Cemented at: _____ Feet

Multiple Stage Cementing Collar Used? Yes No

If yes, show depth set: _____ Feet

If Alternate II completion, cement circulated from: _____

feet depth to: _____ w/ _____ sx cmt.

Drilling Fluid Management Plan

(Data must be collected from the Reserve Pit)

Chloride content: _____ ppm Fluid volume: _____ bbls

Dewatering method used: _____

Location of fluid disposal if hauled offsite: _____

Operator Name: _____

Lease Name: _____ License #: _____

Quarter _____ Sec. _____ Twp. _____ S. R. _____ East West

County: _____ Permit #: _____

AFFIDAVIT

I am the affiant and I hereby certify that all requirements of the statutes, rules and regulations promulgated to regulate the oil and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

Submitted Electronically

KCC Office Use ONLY

- Confidentiality Requested
Date: _____
- Confidential Release Date: _____
- Wireline Log Received
- Geologist Report Received
- UIC Distribution
- ALT I II III Approved by: _____ Date: _____



1113596

Operator Name: _____ Lease Name: _____ Well #: _____

Sec. _____ Twp. _____ S. R. _____ East West County: _____

INSTRUCTIONS: Show important tops of formations penetrated. Detail all cores. Report all final copies of drill stems tests giving interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in pressure reached static level, hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates if gas to surface test, along with final chart(s). Attach extra sheet if more space is needed.

Final Radioactivity Log, Final Logs run to obtain Geophysical Data and Final Electric Logs must be emailed to kcc-well-logs@kcc.ks.gov. Digital electronic log files must be submitted in LAS version 2.0 or newer AND an image file (TIFF or PDF).

Drill Stem Tests Taken <i>(Attach Additional Sheets)</i>	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Log	Formation (Top), Depth and Datum	<input type="checkbox"/> Sample
Samples Sent to Geological Survey	<input type="checkbox"/> Yes <input type="checkbox"/> No	Name	Top	Datum
Cores Taken	<input type="checkbox"/> Yes <input type="checkbox"/> No			
Electric Log Run	<input type="checkbox"/> Yes <input type="checkbox"/> No			
List All E. Logs Run:				

CASING RECORD <input type="checkbox"/> New <input type="checkbox"/> Used							
Report all strings set-conductor, surface, intermediate, production, etc.							
Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives

ADDITIONAL CEMENTING / SQUEEZE RECORD				
Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
<input type="checkbox"/> Perforate				
<input type="checkbox"/> Protect Casing				
<input type="checkbox"/> Plug Back TD				
<input type="checkbox"/> Plug Off Zone				

Did you perform a hydraulic fracturing treatment on this well? Yes No *(If No, skip questions 2 and 3)*

Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons? Yes No *(If No, skip question 3)*

Was the hydraulic fracturing treatment information submitted to the chemical disclosure registry? Yes No *(If No, fill out Page Three of the ACO-1)*

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated	Acid, Fracture, Shot, Cement Squeeze Record <i>(Amount and Kind of Material Used)</i>	Depth

TUBING RECORD: Size: _____ Set At: _____ Packer At: _____ Liner Run: Yes No

Date of First, Resumed Production, SWD or ENHR. _____ Producing Method:
 Flowing Pumping Gas Lift Other *(Explain)* _____

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity

DISPOSITION OF GAS: <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	METHOD OF COMPLETION: <input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5)</i> <i>(Submit ACO-4)</i> <input type="checkbox"/> Other <i>(Specify)</i> _____	PRODUCTION INTERVAL: _____ _____
--	---	---

Form	ACO1 - Well Completion
Operator	Chaco Energy Company
Well Name	Smith 2-27
Doc ID	1113596

All Electric Logs Run

Neutron Density
Sonic
Microresistivity
Induction

Form	ACO1 - Well Completion
Operator	Chaco Energy Company
Well Name	Smith 2-27
Doc ID	1113596

Tops

Name	Top	Datum
Anhydrite	2375	517
Heebner Shale	3872	-971
Lansing	3916	-1015
Startk Shale	4156	-1255
Marmaton	4258	-1357
Ft. Scott	4414	-1513
Cherokee	4441	-1540
Johnson	4485	-1584
Mississippian	4550	-1649

Form	ACO1 - Well Completion
Operator	Chaco Energy Company
Well Name	Smith 2-27
Doc ID	1113596

Perforations

Shots Per Foot	Perforation Record	Material Record	Depth
2	7	1200 gal 15% HCL	4359-66
4	4		4372-76
2	10	1000 gal 15% HCL	4398-4408
4	3	500 gal 15% HCL	4425-4428
3	4	1500 gal 15% HCL	4486-4490
4	3		4492-4495
2	7		4497-4504

Conservation Division
Finney State Office Building
130 S. Market, Rm. 2078
Wichita, KS 67202-3802



Phone: 316-337-6200
Fax: 316-337-6211
<http://kcc.ks.gov/>

Mark Sievers, Chairman
Thomas E. Wright, Commissioner
Shari Feist Albrecht, Commissioner

Sam Brownback, Governor

February 08, 2013

Alan Nelson
Chaco Energy Company
PO BOX 1587
DENVER, CO 80201-1587

Re: ACO1
API 15-109-21145-00-00
Smith 2-27
SE/4 Sec.27-13S-32W
Logan County, Kansas

Dear Production Department:

We are herewith requesting that the Well Completion Form ACO-1 and attached information for the subject well be held confidential for a period of two years.

Should you have any questions or need additional information regarding subject well, please contact our office.

Respectfully,
Alan Nelson



PO Box 93999
Southlake, TX 76092

Voice: (817) 546-7282
Fax: (817) 246-3361

INVOICE

Invoice Number: 133888

Invoice Date: Dec 4, 2012

Page: 1

PROD
CMT ^ CSG, 2 STGS



#2-27

Bill To:
Chaco Energy Company P O Box 1587 Denver, CO 80201

Customer ID	Well Name# or Customer P.O.	Payment Terms	
Chaco	Smith #2-27	Net 30 Days	
Job Location	Camp Location	Service Date	Due Date
KS1-02	Oakley	Dec 4, 2012	1/3/13

Quantity	Item	Description	Unit Price	Amount
558.00	MAT	Class A Common	17.90	9,988.20
68.00	MAT	Pozmix	9.35	635.80
36.00	MAT	Gel	23.40	842.40
17.00	MAT	Salt	26.35	447.95
113.00	MAT	Flo Seal	2.97	335.61
1.00	MAT	Cla Pro	34.40	34.40
12.00	MAT	WFR-2	58.70	704.40
699.98	SER	Cubic Feet	2.48	1,735.97
774.60	SER	Ton Mileage	2.60	2,013.96
1.00	SER	Production -- Bottom Stage	2,765.75	2,765.75
1.00	SER	Production -- Top Stage	2,406.25	2,406.25
25.00	SER	Pump Truck Mileage	7.70	192.50
1.00	SER	Manifold Head Rental	275.00	275.00
25.00	SER	Light Vehicle Mileage	4.40	110.00
1.00	EQP	4.5 D V Tool	4,831.60	4,831.60
1.00	EQP	4.5 Latch Down Assembly	272.61	272.61
6.00	EQP	4.5 Centralizer	56.16	336.96
3.00	EQP	4.5 Basket	315.90	947.70
1.00	EQP	4.5 AFU Float Shoe	496.08	496.08
1.00	CEMENTER	Alan Ryan		
1.00	EQUIP OPER	Wayne McGhghy		

Subtotal	Continued
Sales Tax	Continued
Total Invoice Amount	Continued
Payment/Credit Applied	
TOTAL	Continued

ALL PRICES ARE NET, PAYABLE 30 DAYS FOLLOWING DATE OF INVOICE. 1 1/2% CHARGED THEREAFTER. IF ACCOUNT IS CURRENT, TAKE DISCOUNT OF

\$ See next page

ONLY IF PAID ON OR BEFORE
Dec 29, 2012



PO Box 93999
Southlake, TX 76092

Voice: (817) 546-7282
Fax: (817) 246-3361

INVOICE

Invoice Number: 133888
Invoice Date: Dec 4, 2012
Page: 2



Bill To:
Chaco Energy Company P O Box 1587 Denver, CO 80201

Customer ID	Well Name# or Customer P.O.	Payment Terms	
Chaco	Smith #3-27	Net 30 Days	
Job Location	Camp Location	Service Date	Due Date
KS1-02	Oakley	Dec 4, 2012	1/3/13

Quantity	Item	Description	Unit Price	Amount
1.00	OPER ASSIST	Kevin Ryan		
1.00	OPER ASSIST	Brandon Wilkinson		

Alan Wilkinson
DEC 29 2012

ALL PRICES ARE NET, PAYABLE
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CURRENT, TAKE DISCOUNT OF

\$ 7930.74

ONLY IF PAID ON OR BEFORE
Dec 29, 2012

Subtotal	29,373.14
Sales Tax	1,550.15
Total Invoice Amount	30,923.29
Payment/Credit Applied	
TOTAL	30,923.29

\$22992.55

ALLIED OIL & GAS SERVICES, LLC 058816

Federal Tax I.D.# 20-5975804

REMIT TO P.O. BOX 93999
SOUTHLAKE, TEXAS 76092

SERVICE POINT:

Oakley, KS

DATE <u>11/11</u>	SEC <u>27</u>	TWP <u>13</u>	RANGE <u>32</u>	CALLED OUT	ON LOCATION	JOB START <u>4:00pm</u>	JOB FINISH <u>9:00pm</u>
LEASE <u>Smith</u>	WELL # <u>7-27</u>	LOCATION <u>Oakley 155 W 100yds, S.W. 1/4 Sec 27 T13 R32</u>			COUNTY <u>Logan</u>	STATE <u>KS</u>	
OLD OR NEW (Circle one)							

CONTRACTOR <u>H2 #3</u>	OWNER <u>Same</u>
TYPE OF JOB <u>Production 2 Stage</u>	
HOLE SIZE <u>7 7/8</u> T.D.	CEMENT AMOUNT ORDERED <u>775 Com 1070 feet</u>
CASING SIZE <u>4 1/2</u> DEPTH <u>4641 20</u>	<u>300 gal 450 SKS 85115 800 gal 1000</u>
TUBING SIZE DEPTH	<u>500 gal with 11 1/2 gal 1000</u>
DRILL PIPE DEPTH	
TOOL <u>HV</u> DEPTH <u>2360</u>	
PRES. MAX MINIMUM	COMMON <u>558</u> @ <u>17.90</u> <u>9982.20</u>
MEAS. LINE SHOE JOINT <u>19.65</u>	POZMIX <u>68</u> @ <u>8.32</u> <u>635.60</u>
CEMENT LEFT IN CSG. <u>19.65</u>	GEL <u>36</u> @ <u>23.90</u> <u>842.40</u>
PERFS.	CHLORIDE @
DISPLACEMENT <u>36 1/2 - 36 1/2 70% - 11/11</u>	ASC @

EQUIPMENT	<u>Suits</u> <u>1017</u> @ <u>26.35</u> <u>447.25</u>
PUMP TRUCK CEMENTER <u>Alex Ryan</u> 1	<u>Flo Seal</u> <u>113lb</u> @ <u>2.22</u> <u>335.41</u>
# <u>422</u> HELPER <u>Wayne McCaligly</u> 2	
BULK TRUCK	
# <u>347</u> DRIVER <u>Kevin Ryan</u> 3	<u>Ch Pro</u> <u>1 gal</u> @ <u>34.40</u> <u>34.40</u>
BULK TRUCK	<u>WFB 2</u> <u>1218 GAL</u> @ <u>58.40</u> <u>709.40</u>
# <u>540</u> DRIVER <u>Brandon Wilkinson</u> 3	HANDLING <u>899</u> @ <u>2.10</u> <u>1335.92</u>
	MILBAGE <u>200</u> @ <u>10.67</u> <u>2133.40</u>
	TOTAL <u>16738.49</u>

REMARKS:
Mix with 2 - 4 1/2" tail w/ 100 gal HCL 1/2" Mix 175 SKS
2000 cc 10 70 Silt Washup, Displace Plug 2000 cc
1/2 26 1/2" fluid - 36 1/2" 1/2" w/ 500 1/2" 1/2"
Lead Plug @ 1500, Fluid 1/2" 1/2" 800 1/2" 1/2"
36 2 1/2" Mix 20 SKS 4 1/2" Mix 420
1/2 4000 4 1/2" Washup, Displace Plug 2000 cc
w/ 3 1/2" 1/2" w/ 800 1/2" 1/2" Lead Plug
21700 PST, Tool Closed, Cement Oil
Circulate
Thank You Alex, Wayne, Kevin, Brandon

CHARGE TO: Chaco Energy Co
 STREET _____
 CITY _____ STATE _____ ZIP _____

Bottom Plug down @ 11:15 am
Top " " 6:10 am
11/11

To: Allied Oil & Gas Services, LLC.
 You are hereby requested to rent cementing equipment and furnish cementer and helper(s) to assist owner or contractor to do work as is listed. The above work was done to satisfaction and supervision of owner agent or contractor. I have read and understand the "GENERAL TERMS AND CONDITIONS" listed on the reverse side.

PRINTED NAME Avan Waverlow
 SIGNATURE Avan Waverlow

SERVICE	
DEPTH OF JOB <u>4641</u> 20	<u>Bottom Stage</u> <u>2265.25</u>
PUMP TRUCK CHARGE	<u>2 Stage</u> <u>2400.25</u>
EXTRA FOOTAGE @	
MILEAGE <u>25 miles</u>	@ <u>7.70</u> <u>192.50</u>
MANIFOLD <u>Head</u>	@ <u>2.35</u> <u>235.00</u>
<u>Like 1/2" de 25 mi</u>	@ <u>4.40</u> <u>110.00</u>
	TOTAL <u>5749.00</u>

PLUG & FLOAT EQUIPMENT	
<u>OV Tool</u>	@ <u>4831.00</u>
<u>Latch Down Assembly</u>	@ <u>222.61</u>
<u>Centrifizer 1</u>	@ <u>56.10</u> <u>336.96</u>
<u>Breakers 3</u>	@ <u>305.20</u> <u>917.20</u>
<u>RFU Float Shoe</u>	@ <u>496.28</u>
	TOTAL <u>6884.92</u>

SALES TAX (If Any) 1550.14
 TOTAL CHARGES 29,373.14
 DISCOUNT 7930.74 IF PAID IN 30 DAYS
21442.40
 B'd 2790



PO Box 93999
Southlake, TX 76092

Voice: (817) 546-7282
Fax: (817) 246-3361

INVOICE

Invoice Number: 133888
Invoice Date: Dec 4, 2012
Page: 1

PROD
CMT ↑ CSG, 2 STGS



Bill To:
Chaco Energy Company P O Box 1587 Denver, CO 80201

Customer ID	Well Name/# or Customer P.O.	Payment Terms	
Chaco	Smith #3-27	Net 30 Days	
Job Location	Camp Location	Service Date	Due Date
KS1-02	Oakley	Dec 4, 2012	1/3/13

Quantity	Item	Description	Unit Price	Amount
558.00	MAT	Class A Common	17.90	9,988.20
68.00	MAT	Pozmix	9.35	635.80
36.00	MAT	Gel	23.40	842.40
17.00	MAT	Salt	26.35	447.95
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25.00	SER	Light Vehicle Mileage	4.40	110.00
1.00	EQP	4.5 D V Tool	4,831.60	4,831.60
1.00	EQP	4.5 Latch Down Assembly	272.61	272.61
6.00	EQP	4.5 Centralizer	56.16	336.96
3.00	EQP	4.5 Basket	315.90	947.70
1.00	EQP	4.5 AFU Float Shoe	496.08	496.08
1.00	CEMENTER	Alan Ryan		
1.00	EQUIP OPER	Wayne McGhghy		

Subtotal	Continued
Sales Tax	Continued
Total Invoice Amount	Continued
Payment/Credit Applied	
TOTAL	Continued

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Dec 29, 2012



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Invoice Number: 133888
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Page: 2



Bill To:
Chaco Energy Company P O Box 1587 Denver, CO 80201

Customer ID	Well Name# or Customer P.O.	Payment Terms	
Chaco	Smith #3-27	Net 30 Days	
Job Location	Camp Location	Service Date	Due Date
KS1-02	Oakley	Dec 4, 2012	1/3/13

Quantity	Item	Description	Unit Price	Amount
1.00	OPER ASSIST	Kevin Ryan		
1.00	OPER ASSIST	Brandon Wilkinson		

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\$ 7930.74

ONLY IF PAID ON OR BEFORE
Dec 29, 2012

Subtotal	29,373.14
Sales Tax	1,550.15
Total Invoice Amount	30,923.29
Payment/Credit Applied	
TOTAL	30,923.29

DEC 06 2012

INVOICE

PO Box 93999
Southlake, TX 76092

Invoice Number: 133700

Invoice Date: Nov 24, 2012

Voice: (817) 546-7282

Page: 1

Fax: (817) 246-3361



Bill To:
Chaco Energy Company P O Box 1587 Denver, CO 80201

Customer ID	Well Name/# or Customer P.O.	Payment Terms	
Chaco	Smith #2-27	Net 30 Days	
Job Location	Camp Location	Service Date	Due Date
KS1-01	Oakley	Nov 24, 2012	12/24/12

Quantity	Item	Description	Unit Price	Amount
140.00	MAT	Class A Common	17.90	2,506.00
3.00	MAT	Gel	23.40	70.20
5.00	MAT	Chloride	64.00	320.00
151.38	SER	Cubic Feet	2.48	375.42
172.75	SER	Ton Mileage	2.60	449.15
1.00	SER	Surface	1,512.25	1,512.25
25.00	SER	Pump Truck Mileage	7.70	192.50
1.00	SER	Manifold Swedge Rental	275.00	275.00
25.00	SER	Light Vehicle Mileage	4.40	110.00
1.00	EQP	8.5/8 Wooden Plug	107.64	107.64
1.00	CEMENTER	Darren Racette		
1.00	EQUIP OPER	Tyler Flipse		
1.00	OPER ASSIST	Chris Helpingstine		

Alan Peterson
DEC 10 2012

ALL PRICES ARE NET, PAYABLE 30 DAYS FOLLOWING DATE OF INVOICE. 1 1/2% CHARGED THEREAFTER. IF ACCOUNT IS CURRENT, TAKE DISCOUNT OF

\$ 1,479.54

ONLY IF PAID ON OR BEFORE
Dec 19, 2012

Subtotal	5,918.16
Sales Tax	234.30
Total Invoice Amount	6,152.46
Payment/Credit Applied	
TOTAL	6,152.46

PAY \$4672.92

SCANNED



Diamond Testing General Report

**JAKE
FAHRENBRUCH - TESTER
Cell: (620) 282-8977**

P.O. Box 157
Hoisington KS 67544
Office: (800) 542-7313

General Information

Company Name	Chaco Energy Co.	Well Name	Smith #2-27
Well Operator	Chaco Energy Co.	Unique Well ID	DST #1, Lansing "A-C", 3906'-3986'
Contact	Alan Nelson	Surface Location	Sec 27-13s-32w-Logan Co.-KS
Site Contact	Austin Garner	Test Unit	#5
Field	Loch	Pool	Loch
Well Type	Vertical	Job Number	F059
Prepared By	Jake Fahrenbruch	Qualified By	Austin Garner

Test Information

Test Type	Conventional Bottom Hole	Test Purpose	Initial Test
Formation	Lansing "A-C", 3906'-3986'	Gauge Name	0062
Start Test Date	2012/11/28	Start Test Time	22:27:00
Final Test Date	2012/11/29	Final Test Time	08:15:00

Test Results

Recovered:	1897'	Salt Water	100% wtr	24.06 BBL
	-----	Chlorides:	37,000 ppm	
	-----	RW:	.32 ohm @ 30 deg F	
	-----	PH:	7.0	



DIAMOND TESTING
P.O. Box 157
HOISINGTON, KANSAS 67544
(800) 542-7313
DRILL-STEM TEST TICKET
FILE: _____

TIME ON: _____
TIME OFF: _____

Company _____ Lease & Well No. _____
Contractor _____ Charge to _____
Elevation _____ Formation _____ Effective Pay _____ Ft. Ticket No. _____
Date _____ Sec. _____ Twp. _____ S Range _____ W County _____ State **KANSAS**
Test Approved By _____ Diamond Representative _____

Formation Test No. _____ Interval Tested from _____ ft. to _____ ft. Total Depth _____ ft.
Packer Depth _____ ft. Size 6 3/4 in. Packer depth _____ ft. Size 6 3/4 in.
Packer Depth _____ ft. Size 6 3/4 in. Packer depth _____ ft. Size 6 3/4 in.
Depth of Selective Zone Set _____

Top Recorder Depth (Inside) _____ ft. Recorder Number _____ Cap. _____ P.S.I.
Bottom Recorder Depth (Outside) _____ ft. Recorder Number _____ Cap. _____ P.S.I.
Below Straddle Recorder Depth _____ ft. Recorder Number _____ Cap. _____ P.S.I.

Mud Type _____ Viscosity _____ Drill Collar Length _____ ft. I.D. 2 1/4 in.
Weight _____ Water Loss _____ cc. Weight Pipe Length _____ ft. I.D. 2 7/8 in.
Chlorides _____ P.P.M. Drill Pipe Length _____ ft. I.D. 3 1/2 in.
Jars: Make STERLING Serial Number _____ Test Tool Length _____ ft. Tool Size 3 1/2-IF in.
Did Well Flow? _____ Reversed Out _____ Anchor Length _____ ft. Size 4 1/2-FH in.
Main Hole Size 7 7/8 Tool Joint Size 4 1/2 in. Surface Choke Size 1 in. Bottom Choke Size 5/8 in.

Blow: 1st Open: _____
2nd Open: _____

Recovered _____ ft. of _____	Price Job Other Charges Insurance Total
Recovered _____ ft. of _____	
Recovered _____ ft. of _____	
Recovered _____ ft. of _____	
Recovered _____ ft. of _____	
Recovered _____ ft. of _____	
Remarks: _____	

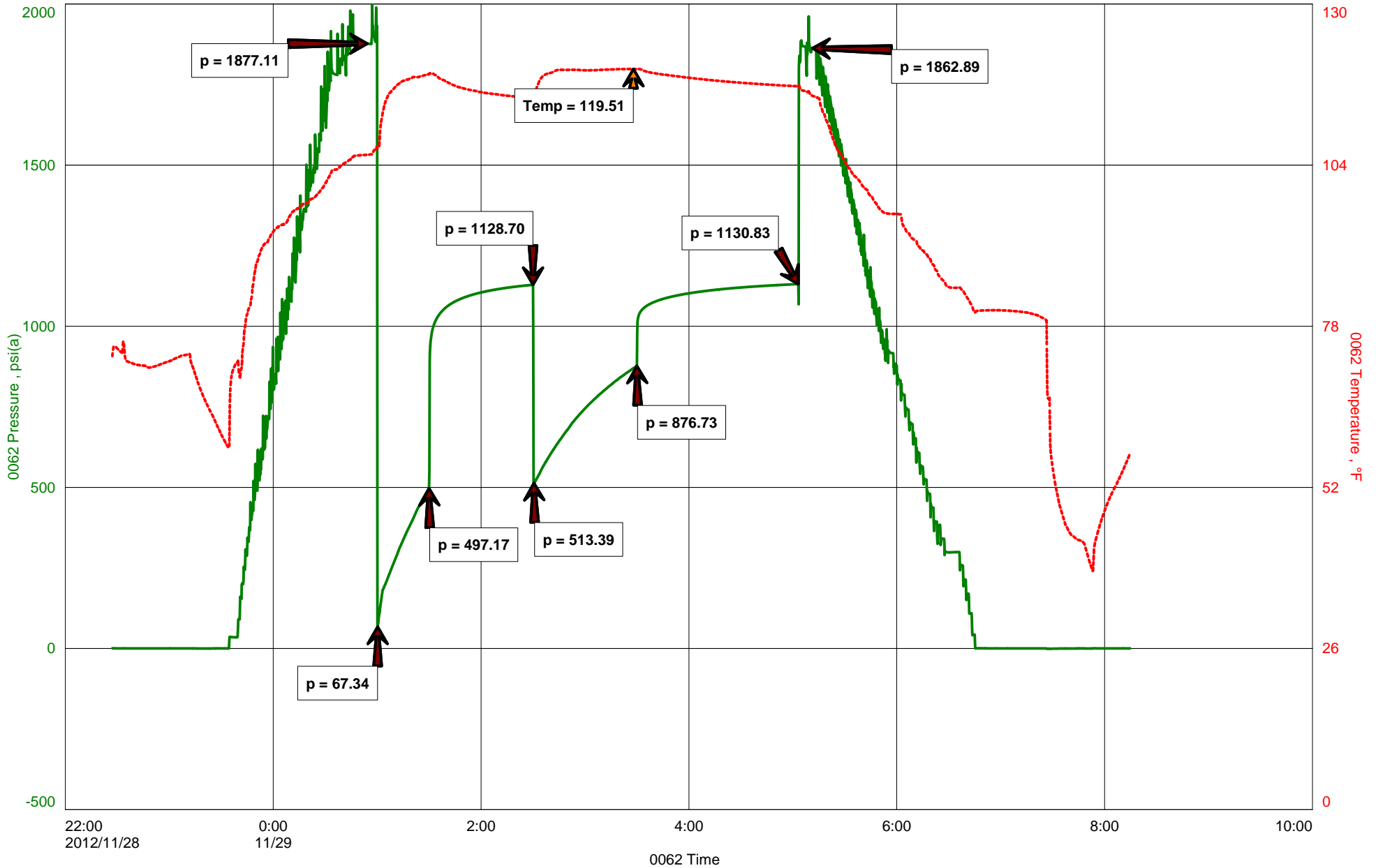
Time Set Packer(s) _____ A.M. P.M. Time Started Off Bottom _____ A.M. P.M. Maximum Temperature _____
Initial Hydrostatic Pressure..... (A) _____ P.S.I.
Initial Flow Period..... Minutes _____ (B) _____ P.S.I. to (C) _____ P.S.I.
Initial Closed In Period..... Minutes _____ (D) _____ P.S.I.
Final Flow Period..... Minutes _____ (E) _____ P.S.I. to (F) _____ P.S.I.
Final Closed In Period..... Minutes _____ (G) _____ P.S.I.
Final Hydrostatic Pressure..... (H) _____ P.S.I.

Diamond Testing shall not be liable for damages of any kind to the property or personnel of the one for whom a test is made or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statement or opinion concerning the result of any test. Tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.

Chaco Energy Co.
DST #1, Lansing "A-C", 3906'-3986'
Start Test Date: 2012/11/28
Final Test Date: 2012/11/29

Smith #2-27
Formation: Lansing "A-C", 3906'-3986'
Pool: Loch
Job Number: F059

Smith #2-27





Diamond Testing General Report

**JAKE
FAHRENBRUCH - TESTER
Cell: (620) 282-8977**

P.O. Box 157
Hoisington KS 67544
Office: (800) 542-7313

General Information

Company Name	Chaco Energy Co.	Well Name	Smith #2-27
Well Operator	Chaco Energy Co.	Unique Well ID	DST #2 Kansas City "K" 4156'-4194'
Contact	Alan Nelson	Surface Location	Sec 27-13s-32w-Logan Co.-KS
Site Contact	Austin Garner	Test Unit	#5
Field	Loch	Pool	Loch
Well Type	Vertical	Job Number	F060
Prepared By	Jake Fahrenbruch	Qualified By	Austin Garner

Test Information

Test Type	Conventional Bottom Hole	Test Purpose	Initial Test
Formation	Kansas City "K" 4156'-4194'	Gauge Name	0062
Start Test Date	2012/11/30	Start Test Time	07:00:00
Final Test Date	2012/11/30	Final Test Time	15:30:00

Test Results

Recovered: 5' Drilling Mud 100% mud



DIAMOND TESTING
P.O. Box 157
HOISINGTON, KANSAS 67544
(800) 542-7313
DRILL-STEM TEST TICKET
FILE: _____

TIME ON: _____
TIME OFF: _____

Company _____ Lease & Well No. _____
Contractor _____ Charge to _____
Elevation _____ Formation _____ Effective Pay _____ Ft. Ticket No. _____
Date _____ Sec. _____ Twp. _____ S Range _____ W County _____ State **KANSAS**
Test Approved By _____ Diamond Representative _____

Formation Test No. _____ Interval Tested from _____ ft. to _____ ft. Total Depth _____ ft.
Packer Depth _____ ft. Size 6 3/4 in. Packer depth _____ ft. Size 6 3/4 in.
Packer Depth _____ ft. Size 6 3/4 in. Packer depth _____ ft. Size 6 3/4 in.
Depth of Selective Zone Set _____

Top Recorder Depth (Inside) _____ ft. Recorder Number _____ Cap. _____ P.S.I.
Bottom Recorder Depth (Outside) _____ ft. Recorder Number _____ Cap. _____ P.S.I.
Below Straddle Recorder Depth _____ ft. Recorder Number _____ Cap. _____ P.S.I.

Mud Type _____ Viscosity _____ Drill Collar Length _____ ft. I.D. 2 1/4 in.
Weight _____ Water Loss _____ cc. Weight Pipe Length _____ ft. I.D. 2 7/8 in.
Chlorides _____ P.P.M. Drill Pipe Length _____ ft. I.D. 3 1/2 in.
Jars: Make STERLING Serial Number _____ Test Tool Length _____ ft. Tool Size 3 1/2-IF in.
Did Well Flow? _____ Reversed Out _____ Anchor Length _____ ft. Size 4 1/2-FH in.
Main Hole Size 7 7/8 Tool Joint Size 4 1/2 in. Surface Choke Size 1 in. Bottom Choke Size 5/8 in.

Blow: 1st Open: _____
2nd Open: _____

Recovered _____ ft. of _____	Price Job Other Charges Insurance Total
Recovered _____ ft. of _____	
Recovered _____ ft. of _____	
Recovered _____ ft. of _____	
Recovered _____ ft. of _____	
Recovered _____ ft. of _____	
Remarks: _____	

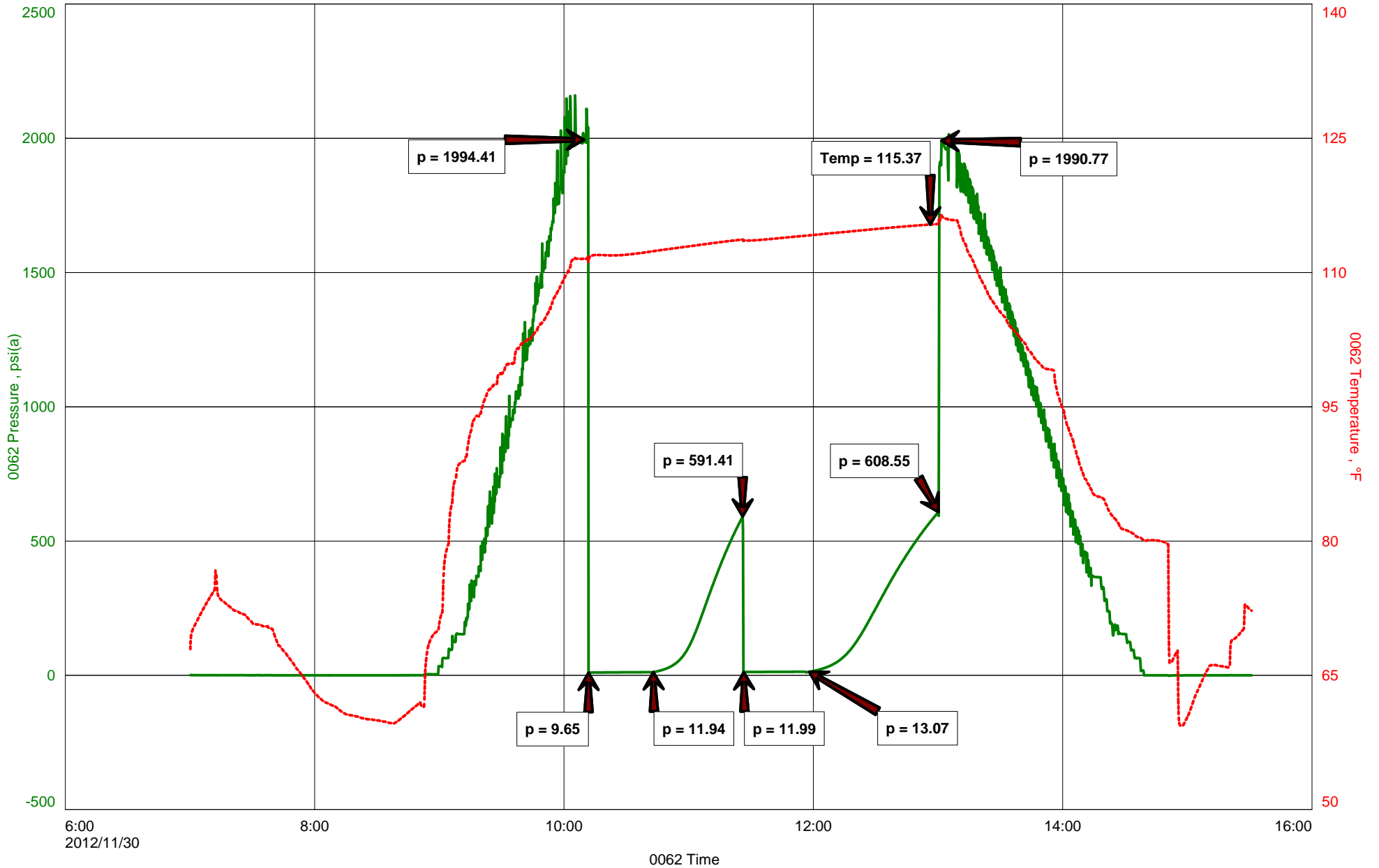
Time Set Packer(s) _____ A.M. P.M. Time Started Off Bottom _____ A.M. P.M. Maximum Temperature _____
Initial Hydrostatic Pressure..... (A) _____ P.S.I.
Initial Flow Period..... Minutes _____ (B) _____ P.S.I. to (C) _____ P.S.I.
Initial Closed In Period..... Minutes _____ (D) _____ P.S.I.
Final Flow Period..... Minutes _____ (E) _____ P.S.I. to (F) _____ P.S.I.
Final Closed In Period..... Minutes _____ (G) _____ P.S.I.
Final Hydrostatic Pressure..... (H) _____ P.S.I.

Diamond Testing shall not be liable for damages of any kind to the property or personnel of the one for whom a test is made or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statement or opinion concerning the result of any test. Tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.

Chaco Energy Co.
DST #2 Kansas City "K" 4156'-4194'
Start Test Date: 2012/11/30
Final Test Date: 2012/11/30

Smith #2-27
Formation: Kansas City "K" 4156'-4194'
Pool: Loch
Job Number: F060

Smith #2-27





Diamond Testing General Report

**JAKE
FAHRENBRUCH - TESTER
Cell: (620) 282-8977**

P.O. Box 157
Hoisington KS 67544
Office: (800) 542-7313

General Information

Company Name	Chaco Energy Co	Well Name	Smith #2-27
Well Operator	Chaco Energy Co.	Unique Well ID	DST #3 Pawnee 4352'-4386'
Contact	Alan Nelson	Surface Location	Sec 27-13s-32w-Logan Co.-KS
Site Contact	Austin Garner	Test Unit	#5
Field	Loch	Pool	Loch
Well Type	Vertical	Job Number	F061
Prepared By	Jake Fahrenbruch	Qualified By	Austin Garner

Test Information

Test Type	Conventional Bottom Hole	Test Purpose	Initial Test
Formation	Pawnee 4352'-4386'	Gauge Name	0062
Start Test Date	2012/12/01	Start Test Time	11:04:00
Final Test Date	2012/12/01	Final Test Time	18:41:00

Test Results

Recovered: 120' SOSM <1% oil, >99% mud .59 BBL
 ----- Tool Sample: SOSM <1% oil, >99% mud



DIAMOND TESTING
P.O. Box 157
HOISINGTON, KANSAS 67544
(800) 542-7313
DRILL-STEM TEST TICKET
FILE: _____

TIME ON: _____
TIME OFF: _____

Company _____ Lease & Well No. _____
Contractor _____ Charge to _____
Elevation _____ Formation _____ Effective Pay _____ Ft. Ticket No. _____
Date _____ Sec. _____ Twp. _____ S Range _____ W County _____ State **KANSAS**
Test Approved By _____ Diamond Representative _____

Formation Test No. _____ Interval Tested from _____ ft. to _____ ft. Total Depth _____ ft.
Packer Depth _____ ft. Size 6 3/4 in. Packer depth _____ ft. Size 6 3/4 in.
Packer Depth _____ ft. Size 6 3/4 in. Packer depth _____ ft. Size 6 3/4 in.
Depth of Selective Zone Set _____

Top Recorder Depth (Inside) _____ ft. Recorder Number _____ Cap. _____ P.S.I.
Bottom Recorder Depth (Outside) _____ ft. Recorder Number _____ Cap. _____ P.S.I.
Below Straddle Recorder Depth _____ ft. Recorder Number _____ Cap. _____ P.S.I.

Mud Type _____ Viscosity _____ Drill Collar Length _____ ft. I.D. 2 1/4 in.
Weight _____ Water Loss _____ cc. Weight Pipe Length _____ ft. I.D. 2 7/8 in.
Chlorides _____ P.P.M. Drill Pipe Length _____ ft. I.D. 3 1/2 in.
Jars: Make STERLING Serial Number _____ Test Tool Length _____ ft. Tool Size 3 1/2-IF in.
Did Well Flow? _____ Reversed Out _____ Anchor Length _____ ft. Size 4 1/2-FH in.
Main Hole Size 7 7/8 Tool Joint Size 4 1/2 in. Surface Choke Size 1 in. Bottom Choke Size 5/8 in.

Blow: 1st Open: _____
2nd Open: _____

Recovered _____ ft. of _____	Price Job Other Charges Insurance Total
Recovered _____ ft. of _____	
Recovered _____ ft. of _____	
Recovered _____ ft. of _____	
Recovered _____ ft. of _____	
Recovered _____ ft. of _____	
Remarks: _____	

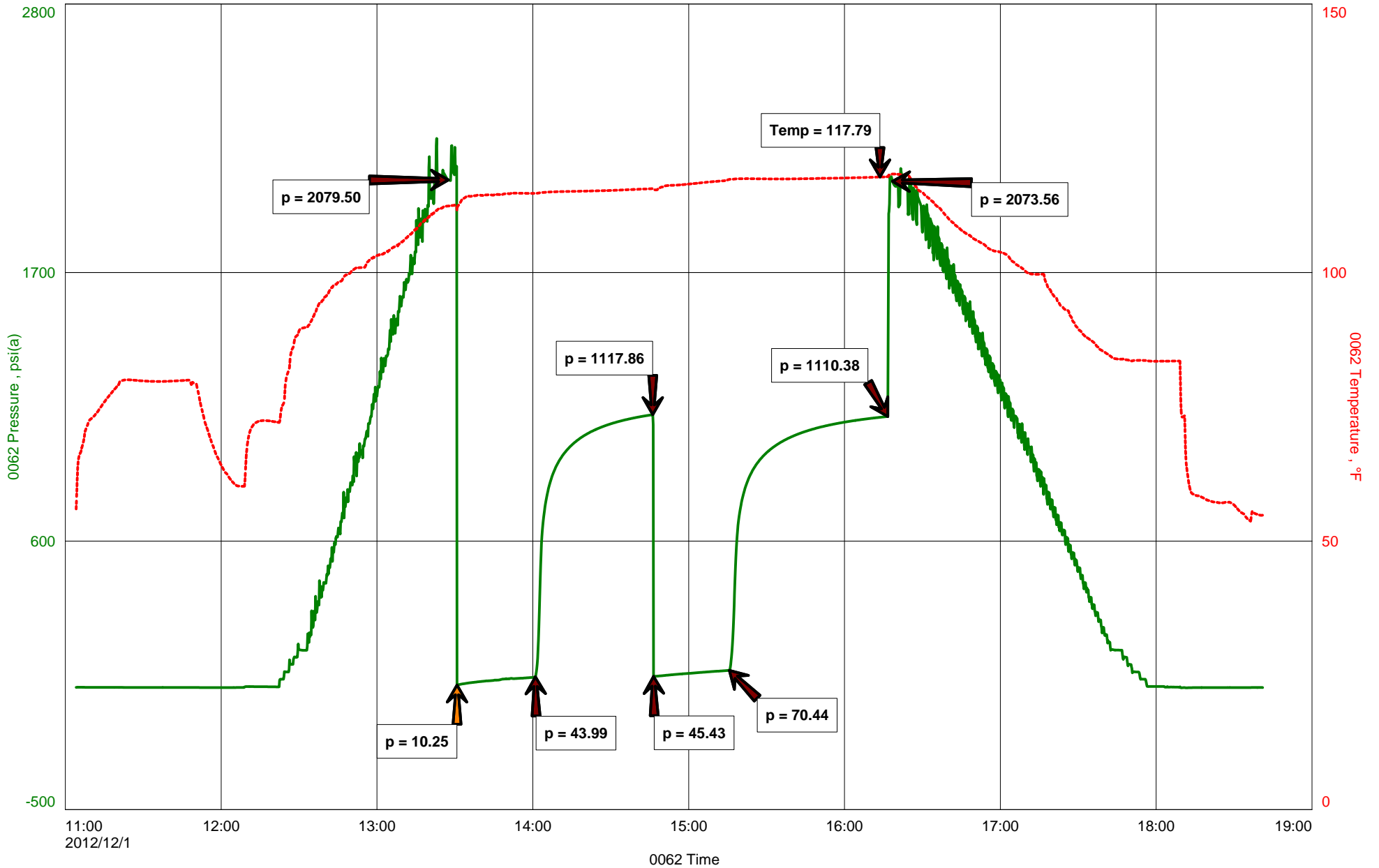
Time Set Packer(s) _____ A.M. P.M. Time Started Off Bottom _____ A.M. P.M. Maximum Temperature _____
Initial Hydrostatic Pressure..... (A) _____ P.S.I.
Initial Flow Period..... Minutes _____ (B) _____ P.S.I. to (C) _____ P.S.I.
Initial Closed In Period..... Minutes _____ (D) _____ P.S.I.
Final Flow Period..... Minutes _____ (E) _____ P.S.I. to (F) _____ P.S.I.
Final Closed In Period..... Minutes _____ (G) _____ P.S.I.
Final Hydrostatic Pressure..... (H) _____ P.S.I.

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Chaco Energy Co
DST #3 Pawnee 4352'-4386'
Start Test Date: 2012/12/01
Final Test Date: 2012/12/01

Smith #2-27
Formation: Pawnee 4352'-4386'
Pool: Loch
Job Number: F061

Smith #2-27





Diamond Testing General Report

**JAKE
FAHRENBRUCH - TESTER
Cell: (620) 282-8977**

P.O. Box 157
Hoisington KS 67544
Office: (800) 542-7313

General Information

Company Name	Chaco Energy Co.	Well Name	Smith #2-27
Well Operator	Chaco Energy Co.	Unique Well ID	DST #4 Cherokee/Johnson 4440'-4510'
Contact	Alan Nelson	Surface Location	Sec 27-13s-31w-Logan Co.-KS
Site Contact	Austin Garner	Test Unit	#5
Field	Loch	Pool	Loch
Well Type	Vertical	Job Number	F062
Prepared By	Jake Fahrenbruch	Qualified By	Austin Garner

Test Information

Test Type	Conventional Bottom-Hole	Test Purpose	Initial Test
Formation	Cherokee/Johnson 4440'-4510'	Gauge Name	0062
Start Test Date	2012/12/02	Start Test Time	11:35:00
Final Test Date	2012/12/02	Final Test Time	19:40:00

Test Results

Recovered:	3'	Clean Oil	100% oil	.04 BBL	
	152'	OSWCM	2% oil, 22% wtr, 76% mud	.96 BBL	
	60'	OSMCW	1% oil, 85% wtr, 14% mud	.29 BBL	
	120'	OSW	1% oil, 99% wtr	.59 BBL	
	-----	Total Fluid Recovered: 335'-----		1.88 BBL	
	-----	Tool Sample: OSW	1% oil, 99% wtr		
	-----	Chlorides:	49,000 ppm		
	-----	RW:	.19 ohm @ 51 deg F		
	-----	PH:	7.5		
	-----	(un-able to retrieve oil sample to check gravity)			
	-----	(oil appeared to be of approximately 35 gravity)			



DIAMOND TESTING
P.O. Box 157
HOISINGTON, KANSAS 67544
(800) 542-7313
DRILL-STEM TEST TICKET
FILE: _____

TIME ON: _____
TIME OFF: _____

Company _____ Lease & Well No. _____
Contractor _____ Charge to _____
Elevation _____ Formation _____ Effective Pay _____ Ft. Ticket No. _____
Date _____ Sec. _____ Twp. _____ S Range _____ W County _____ State **KANSAS**
Test Approved By _____ Diamond Representative _____

Formation Test No. _____ Interval Tested from _____ ft. to _____ ft. Total Depth _____ ft.
Packer Depth _____ ft. Size 6 3/4 in. Packer depth _____ ft. Size 6 3/4 in.
Packer Depth _____ ft. Size 6 3/4 in. Packer depth _____ ft. Size 6 3/4 in.
Depth of Selective Zone Set _____

Top Recorder Depth (Inside) _____ ft. Recorder Number _____ Cap. _____ P.S.I.
Bottom Recorder Depth (Outside) _____ ft. Recorder Number _____ Cap. _____ P.S.I.
Below Straddle Recorder Depth _____ ft. Recorder Number _____ Cap. _____ P.S.I.

Mud Type _____ Viscosity _____ Drill Collar Length _____ ft. I.D. 2 1/4 in.
Weight _____ Water Loss _____ cc. Weight Pipe Length _____ ft. I.D. 2 7/8 in.
Chlorides _____ P.P.M. Drill Pipe Length _____ ft. I.D. 3 1/2 in.
Jars: Make STERLING Serial Number _____ Test Tool Length _____ ft. Tool Size 3 1/2-IF in.
Did Well Flow? _____ Reversed Out _____ Anchor Length _____ ft. Size 4 1/2-FH in.
Main Hole Size 7 7/8 Tool Joint Size 4 1/2 in. Surface Choke Size 1 in. Bottom Choke Size 5/8 in.

Blow: 1st Open: _____
2nd Open: _____

Recovered _____ ft. of _____	
Recovered _____ ft. of _____	
Recovered _____ ft. of _____	
Recovered _____ ft. of _____	
Recovered _____ ft. of _____	Price Job
Recovered _____ ft. of _____	Other Charges
Remarks: _____	Insurance
	Total

Time Set Packer(s) _____ A.M. P.M. Time Started Off Bottom _____ A.M. P.M. Maximum Temperature _____
Initial Hydrostatic Pressure..... (A) _____ P.S.I.
Initial Flow Period..... Minutes _____ (B) _____ P.S.I. to (C) _____ P.S.I.
Initial Closed In Period..... Minutes _____ (D) _____ P.S.I.
Final Flow Period..... Minutes _____ (E) _____ P.S.I. to (F) _____ P.S.I.
Final Closed In Period..... Minutes _____ (G) _____ P.S.I.
Final Hydrostatic Pressure..... (H) _____ P.S.I.

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Chaco Energy Co.
DST #4 Cherokee/Johnson 4440'-4510'
Start Test Date: 2012/12/02
Final Test Date: 2012/12/02

Smith #2-27
Formation: Cherokee/Johnson 4440'-4510'
Pool: Loch
Job Number: F062

Smith #2-27

