

Formation Testing Service Report

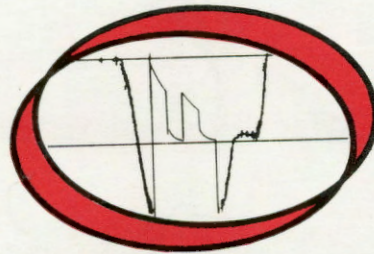
VONDRA
Lease Name

1
Well No.

1
Test No.

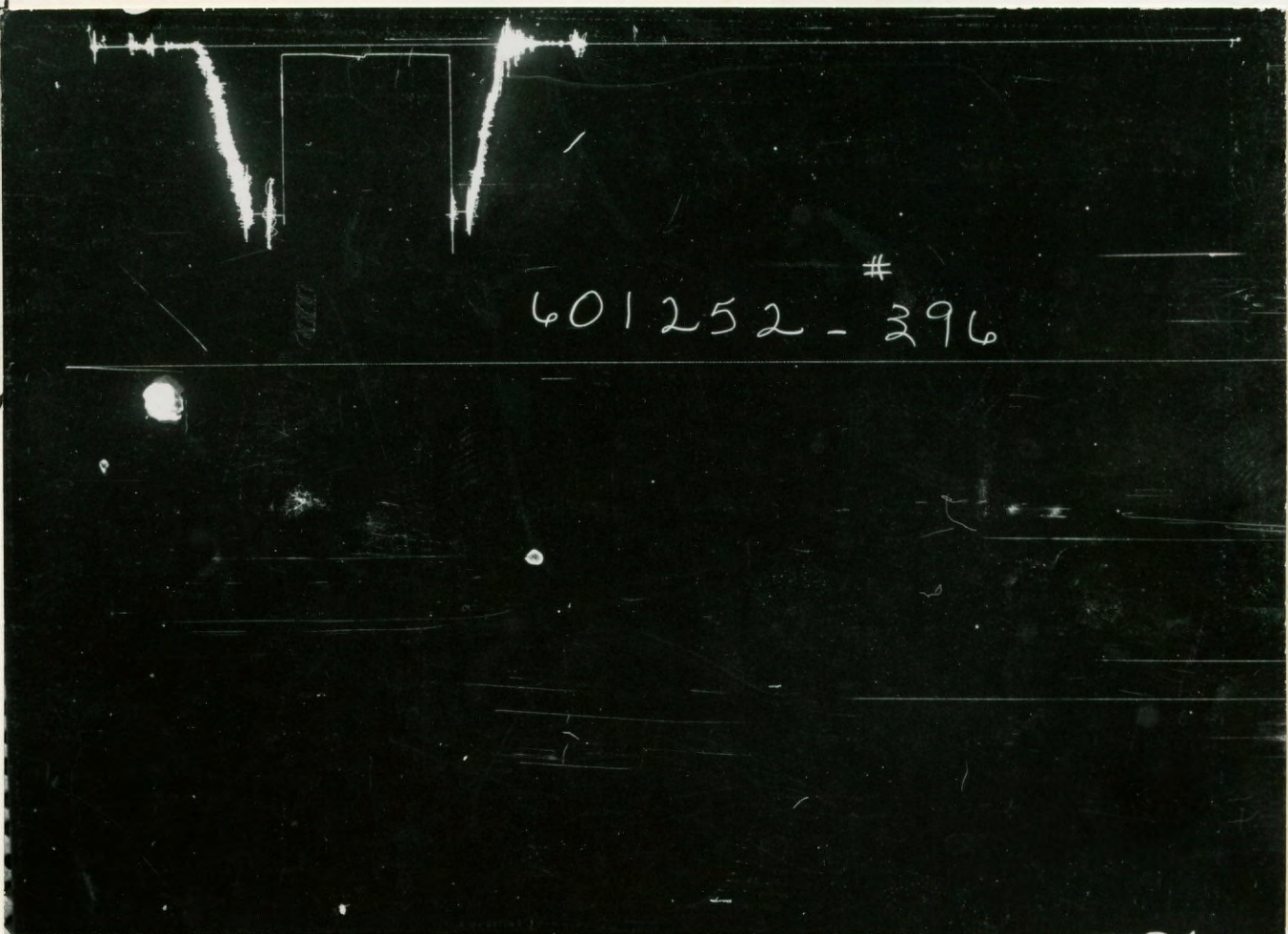
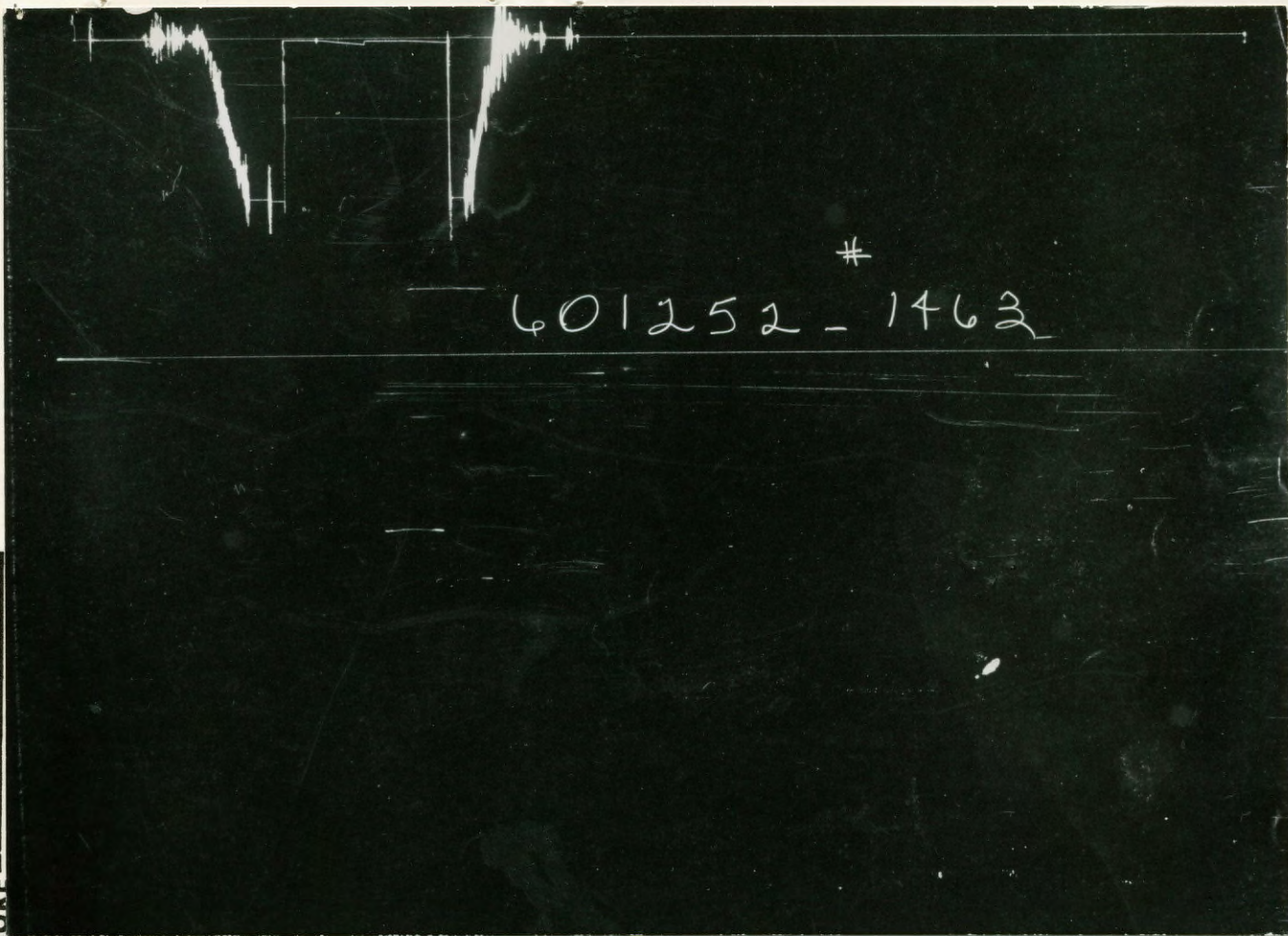
960' - 995'
Tested Interval

GLEN RUPE
Lease Owner/Company Name



REC'D AUG 9 1973

HALLIBURTON SERVICES
DUNCAN, OKLAHOMA



Each Horizontal Line Equal to 1000 p.s.i.

FLUID SAMPLE DATA		Date	8-2-73	Ticket Number	601252
Sampler Pressure _____ P.S.I.G. at Surface	Kind of Job	OPEN HOLE	Halliburton District	GREAT BEND	
Recovery: Cu. Ft. Gas _____	Tester	MOORE	Witness	FOLEY	
cc. Oil _____	Drilling Contractor	STERLING DRILLING COMPANY		NM	
cc. Water _____	EQUIPMENT & HOLE DATA				
cc. Mud _____	Formation Tested	Herrington Krider			
Tot. Liquid cc. _____	Elevation	_____ Ft.			
Gravity _____ ° API @ _____ °F.	Net Productive Interval	_____ Ft.			
Gas/Oil Ratio _____ cu. ft./bbl.	All Depths Measured From	Ground Level			
	Total Depth	995' _____ Ft.			
	Main Hole/Casing Size	6 1/2"			
	Drill Collar Length	174.12'	I.D.	2.50"	
	Drill Pipe Length	769'	I.D.	2.441"	
	Packer Depth(s)	960' _____ Ft.			
	Depth Tester Valve	947' _____ Ft.			
	RESISTIVITY	CHLORIDE CONTENT			
Recovery Water _____ @ _____ °F. _____ ppm					
Recovery Mud _____ @ _____ °F. _____ ppm					
Recovery Mud Filtrate _____ @ _____ °F. _____ ppm					
Mud Pit Sample _____ @ _____ °F. _____ ppm					
Mud Pit Sample Filtrate _____ @ _____ °F. _____ ppm					
Mud Weight 10.4 vis 34 cp					

Cushion	TYPE NONE	AMOUNT	Depth Back Pres. Valve	NONE	Surface Choke	1/2"	Bottom Choke	5/8"
---------	-----------	--------	------------------------	------	---------------	------	--------------	------

Recovered	2'	Feet of	drilling mud	Mea. From Tester Valve
Recovered		Feet of		
Recovered		Feet of		
Recovered		Feet of		
Recovered		Feet of		
Recovered		Feet of		

Remarks Tool opened with a very weak blow - died in 5 minutes. Closed tool for a 30 minute first closed in pressure. Tool reopened with no blow for a 20 minute second flow. Took a 30 minute second closed in pressure.

TEMPERATURE	Gauge No. 1463		Gauge No. 396		Gauge No.		TIME	
	Depth: 952' Ft.		Depth: 990' Ft.		Depth:			
Est. °F.	12	Hour Clock	12	Hour Clock	Hour Clock		Tool	A.M.
	Blanked Off	NO	Blanked Off	YES	Blanked Off		Opened	1032 P.M.
Actual 78 °F.	Pressures		Pressures		Pressures		Tool	A.M.
	Field	Office	Field	Office	Field	Office	Closed	1212 P.M.
Initial Hydrostatic	-	514	532	532			Reported	Computed
First Period Flow	Initial	-	9	24	33		Minutes	Minutes
	Final	-	8	24	29		20	
	Closed in	-	21	39	39		30	
Second Period Flow	Initial	-	13	31	34			
	Final	-	10	31	30		20	
	Closed in	-	16	39	34		30	
Third Period Flow	Initial	-						
	Final	-						
Closed in	-							
Final Hydrostatic	-	506	532	524				

Legal Location Sec. - Twp. - Rng. VONDRA
 Lease Name
 Well No. 1
 Test No. 1
 Tested Interval 960' - 995'
 Field Area WILDCAT
 County ELLSWORTH
 State KANSAS
 Lease Owner/Company Name GLEN RUPE

	O. D.	I. D.	LENGTH	DEPTH
Reversing Sub				
Water Cushion Valve				
Drill Pipe	2 7/8"	2.441"	769'	
Drill Collars	5 1/4"	2.50"	174.12'	
Handling Sub & Choke Assembly				
Dual CIP Valve	3.88"	.87"	64.97"	
Dual CIP Sampler				
Hydro-Spring Tester	3.90"	.62"	61.12"	947'
Multiple CIP Sampler				
Extension Joint				
AP Running Case	3"	3.03"	48.80"	952'
Hydraulic Jar				
VR Safety Joint				
Pressure Equalizing Crossover				
Packer Assembly	5 1/4"	.37"	60"	960'
Distributor				
Packer Assembly				
Flush Joint Anchor	3"	1.25"	28'	
Pressure Equalizing Tube				
Blanked-Off B.T. Running Case	3"	3.03"	59.20"	990'
Drill Collars				
Anchor Pipe Safety Joint				
Packer Assembly				
Packer Assembly				
Anchor Pipe Safety Joint				
Side Wall Anchor				
Drill Collars				
Flush Joint Anchor				
Blanked-Off B.T. Running Case				

D.S.T. Report Distribution



A Division of Halliburton Company

FORM 1509R3

DUNCAN, OKLAHOMA 73533

GLEN RUPE

Company Name - - Lease Owner

Requested Distribution of Completed D.S.T. Report Folder
for Ticket No. 601252

(This Order Must Be Filled Out and Signed By Company Representative)

Company GLEN RUPE
Orig. Chart

5
& Reports

ATT. _____

P.O. BOX
STREET & NO.
BUILDING

CITY
STATE

ZIP CODE NUMBER

925 OLIVE GARVEY BLDG
WICHITA, KANS.

Company _____



Reports

ATT. _____

P.O. BOX
STREET & NO.
BUILDING

CITY
STATE

ZIP CODE NUMBER

Company _____



Reports

ATT. _____

P.O. BOX
STREET & NO.
BUILDING

CITY
STATE

ZIP CODE NUMBER

Company _____



Reports

ATT. _____

P.O. BOX
STREET & NO.
BUILDING

CITY
STATE

ZIP CODE NUMBER

Company _____



Reports

ATT. _____

P.O. BOX
STREET & NO.
BUILDING

CITY
STATE

ZIP CODE NUMBER

Owner - Operator - or His Agent

SIGNED DICK FOLEY, Agent

Send 1st, 2nd and 3rd Copy with Charts

(Use Additional Sheets When Necessary)

Formation Testing Service Report

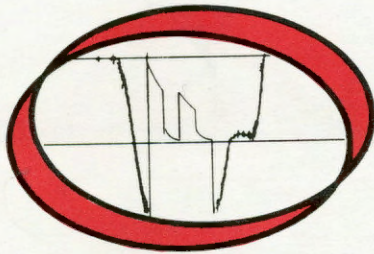
Lease Name **VONDRA**

Well No. **1**

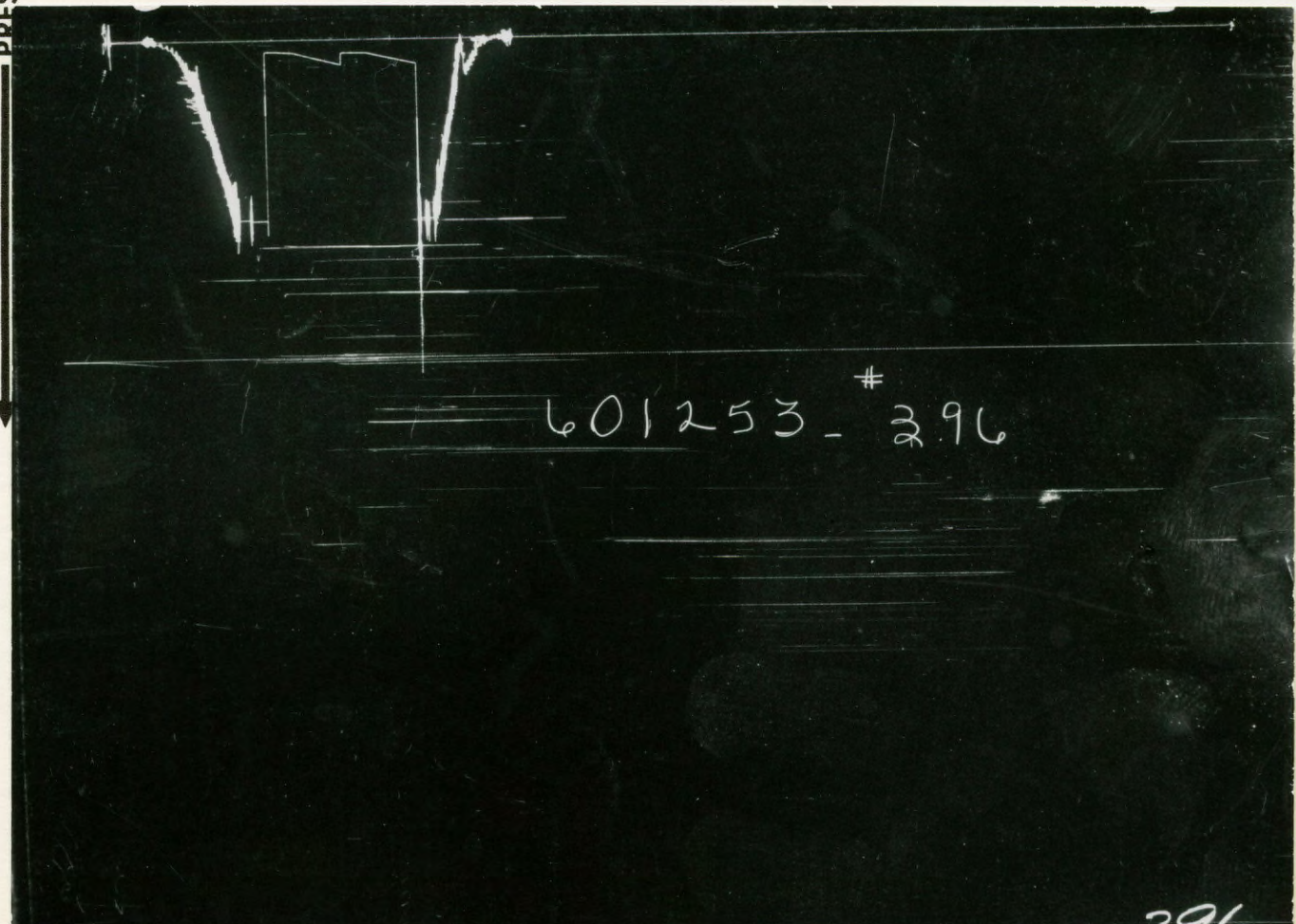
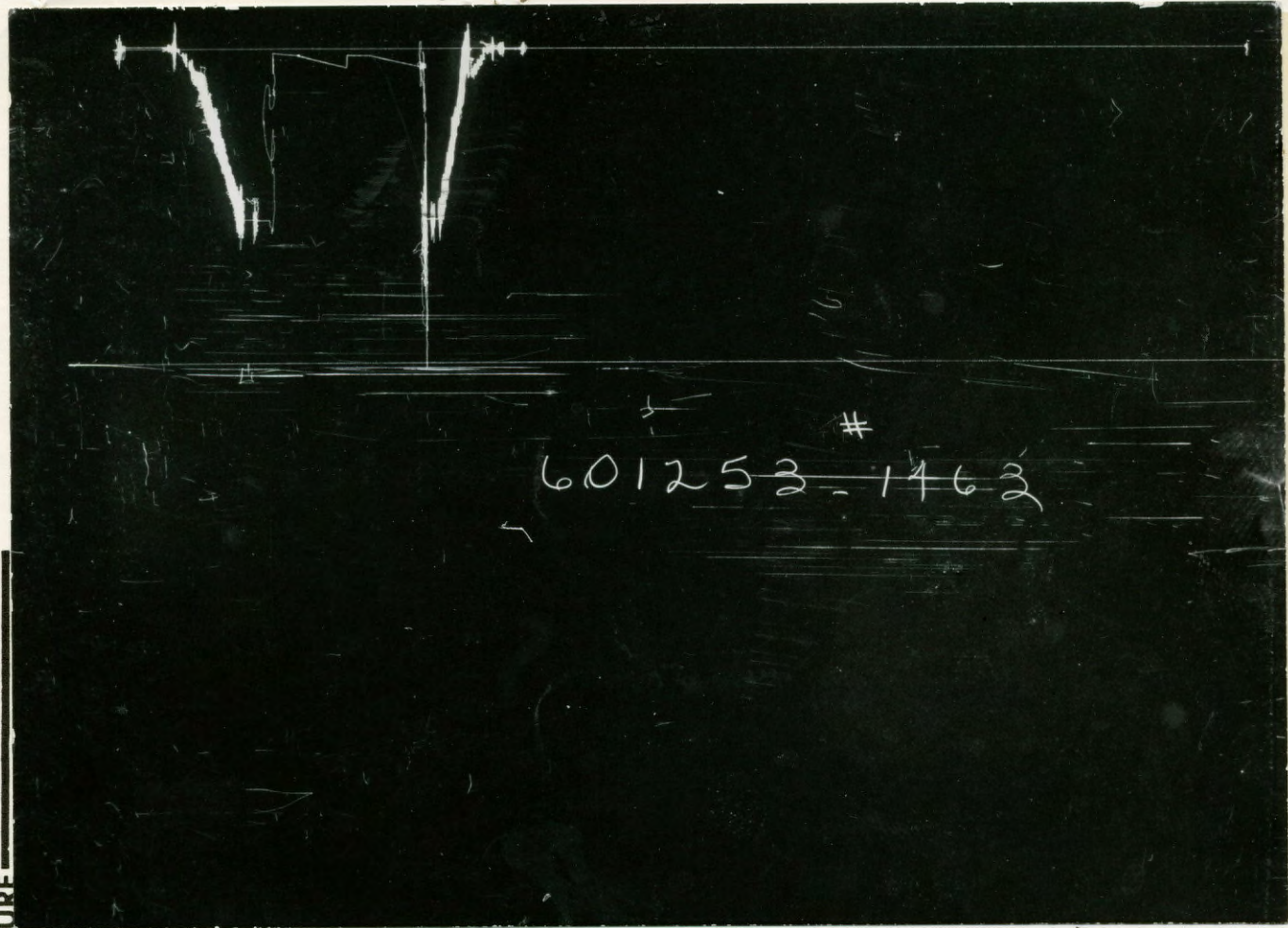
Test No. **2**

Tested Interval **1015' - 1055'**

Lease Owner/Company Name **GLEN RUPE**



REC'D AUG 2 1973



Each Horizontal Line Equal to 1000 p.s.i.

296

FLUID SAMPLE DATA		Date 8-2-73	Ticket Number 601253
Sampler Pressure _____ P.S.I.G. at Surface	Kind of Job OPEN HOLE	Halliburton District GREAT BEND	
Recovery: Cu. Ft. Gas _____	Tester MOORE	Witness FOLEY	
cc. Oil _____	Drilling Contractor STERLING DRILLING COMPANY		NM
cc. Water _____	EQUIPMENT & HOLE DATA		
cc. Mud _____	Formation Tested Winfield		
Tot. Liquid cc. _____	Elevation 1567' G.L.	Ft.	
Gravity _____ ° API @ _____ °F.	Net Productive Interval _____	Ft.	
Gas/Oil Ratio _____ cu. ft./bbl.	All Depths Measured From Ground Level		
	Total Depth 1055'	Ft.	
	Main Hole/Casing Size 6 1/2"		
	Drill Collar Length 174.12'	I.D. 2.50"	
	Drill Pipe Length 824'	I.D. 2.441"	
	Packer Depth(s) 1015'	Ft.	
	Depth Tester Valve 1002'	Ft.	

TYPE	AMOUNT	Depth Back	Surface	Bottom
Cushion	NONE	Ft. Pres. Valve NONE	Choke 1/2"	Choke 5/8"

Recovered	30'	Feet of	drilling mud
Recovered		Feet of	
Recovered		Feet of	TIGHT HOLE....
Recovered		Feet of	
Recovered		Feet of	

Remarks **Tool opened for a 15 minute first flow with a very weak blow - which died in 10 minutes. Closed tool for a 30 minute first closed in pressure. Tool reopened for a 15 minute second flow. Took a 30 minute second closed in pressure.**

TEMPERATURE	Gauge No. 1463		Gauge No. 396		Gauge No.		TIME	
	Depth:	1007'	Depth:	1050'	Depth:			
Est. °F.	12 Hour Clock		12 Hour Clock		Hour Clock		Tool	A.M.
	Blanked Off NO		Blanked Off YES		Blanked Off		Opened 1050	P.M.
Actual 78° °F.	Pressures		Pressures		Pressures		Tool	A.M.
	Field	Office	Field	Office	Field	Office	Closed 1220	P.M.
Initial Hydrostatic	-	548	563	569			Reported	Computed
							Minutes	Minutes
First Period Flow	Initial	-	16	31	42			
	Final	-	21	31	41		15	
	Closed in	-	60	78	79		30	
Second Period Flow	Initial	-	23	39	45			
	Final	-	24	39	42		15	
	Closed in	-	58	78	77		30	
Third Period Flow	Initial	-						
	Final	-						
	Closed in	-						
Final Hydrostatic	-	545	563	564				

Legal Location Sec. - Twp. - Rng. _____
 Lease Name **VONDRA**
 Well No. **1**
 Test No. **2**
 Tested Interval **1015' - 1055'**
 Field Area **WILDCAT**
 County **ELLISWORTH**
 State **KANSAS**
 Lease Owner/Company Name **GLEN RUPE**

	O. D.	I. D.	LENGTH	DEPTH
Reversing Sub				
Water Cushion Valve				
Drill Pipe	2 7/8"	2.441"	824'	
Drill Collars	5 1/4"	2.50"	174.12'	
Handling Sub & Choke Assembly				
Dual CIP Valve	3.88"	.87"	64.97"	
Dual CIP Sampler				
Hydro-Spring Tester	3.90"	.62"	61.12"	1002'
Multiple CIP Sampler				
Extension Joint				
AP Running Case	3"	3.03"	48.80"	1007'
Hydraulic Jar				
VR Safety Joint				
Pressure Equalizing Crossover				
Packer Assembly	5 1/4"	.37"	60"	1015'
Distributor				
Packer Assembly				
Flush Joint Anchor	3"	1.25"	33'	
Pressure Equalizing Tube				
Blanked-Off B.T. Running Case	3"	3.03"	59.20"	1050'
Drill Collars				
Anchor Pipe Safety Joint				
Packer Assembly				
Packer Assembly				
Anchor Pipe Safety Joint				
Side Wall Anchor				
Drill Collars				
Flush Joint Anchor				
Blanked-Off B.T. Running Case				

D.S.T. Report Distribution



A Division of Halliburton Company

FORM 1509R3

DUNCAN, OKLAHOMA 73533

GLEN RUPE

Company Name - - Lease Owner

Requested Distribution of Completed D.S.T. Report Folder
for Ticket No. 601253

(This Order Must Be Filled Out and Signed By Company Representative)

Company
Orig. Chart

GLEN RUPE

5
& Reports

ATT.

P.O. BOX
STREET & NO.
BUILDING

925 OLIVE GARVEY BLDG

CITY
STATE

WICHITA, KANS.

ZIP CODE NUMBER

Company



ATT.

P.O. BOX
STREET & NO.
BUILDING

Reports

CITY
STATE

ZIP CODE NUMBER

Company



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STREET & NO.
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Reports

CITY
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Reports

CITY
STATE

ZIP CODE NUMBER

Company



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P.O. BOX
STREET & NO.
BUILDING

Reports

CITY
STATE

ZIP CODE NUMBER

Owner - Operator - or His Agent

SIGNED

DICK FOLEY

, Agent

Send 1st, 2nd and 3rd Copy with Charts

(Use Additional Sheets When Necessary)

Formation Testing Service Report

VONDRA

Lease Name

1

Well No.

3

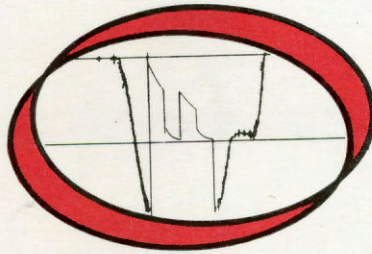
Test No.

1080' - 1110'

Tested Interval

GLEN RUPE

Lease Owner/Company Name

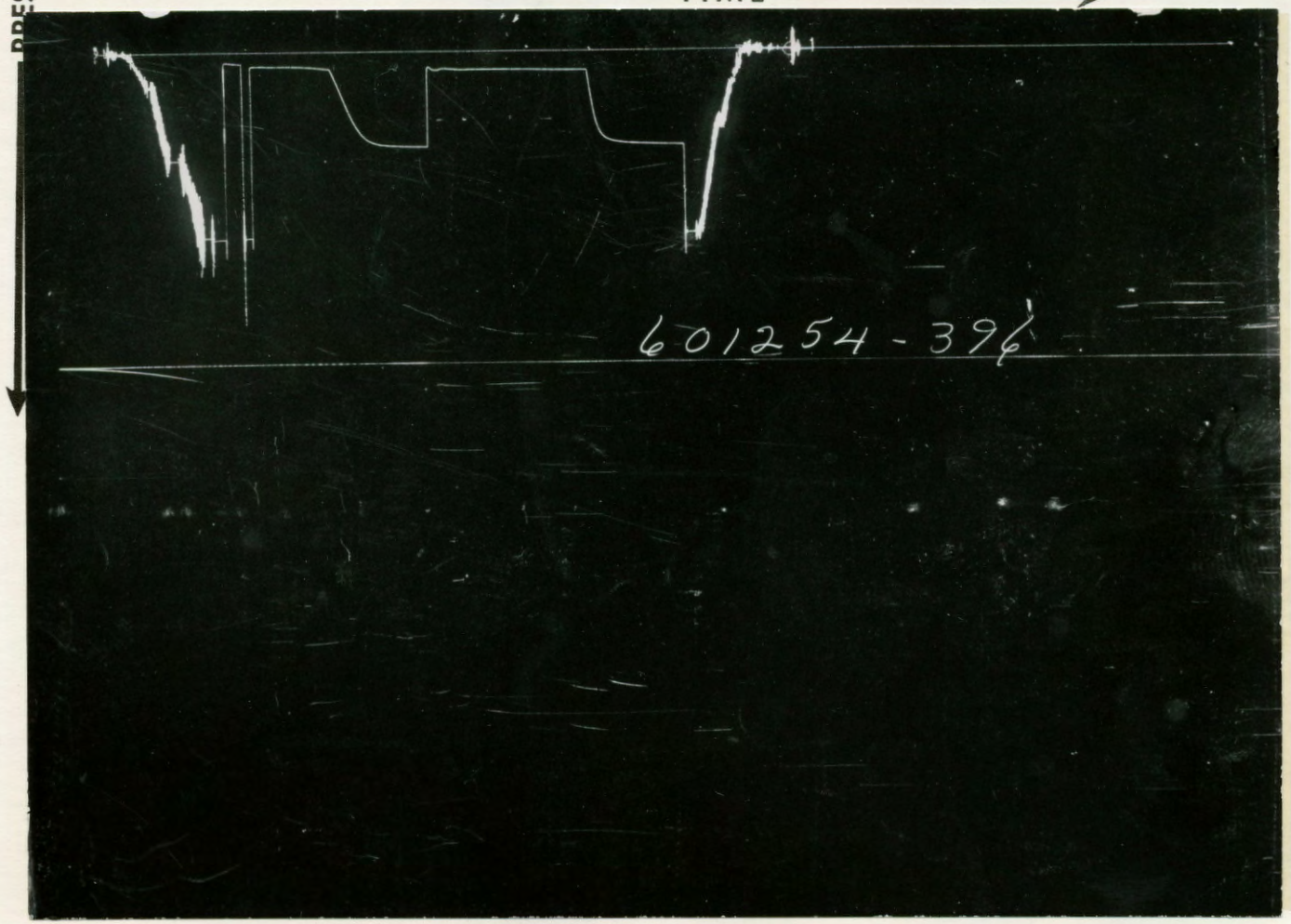
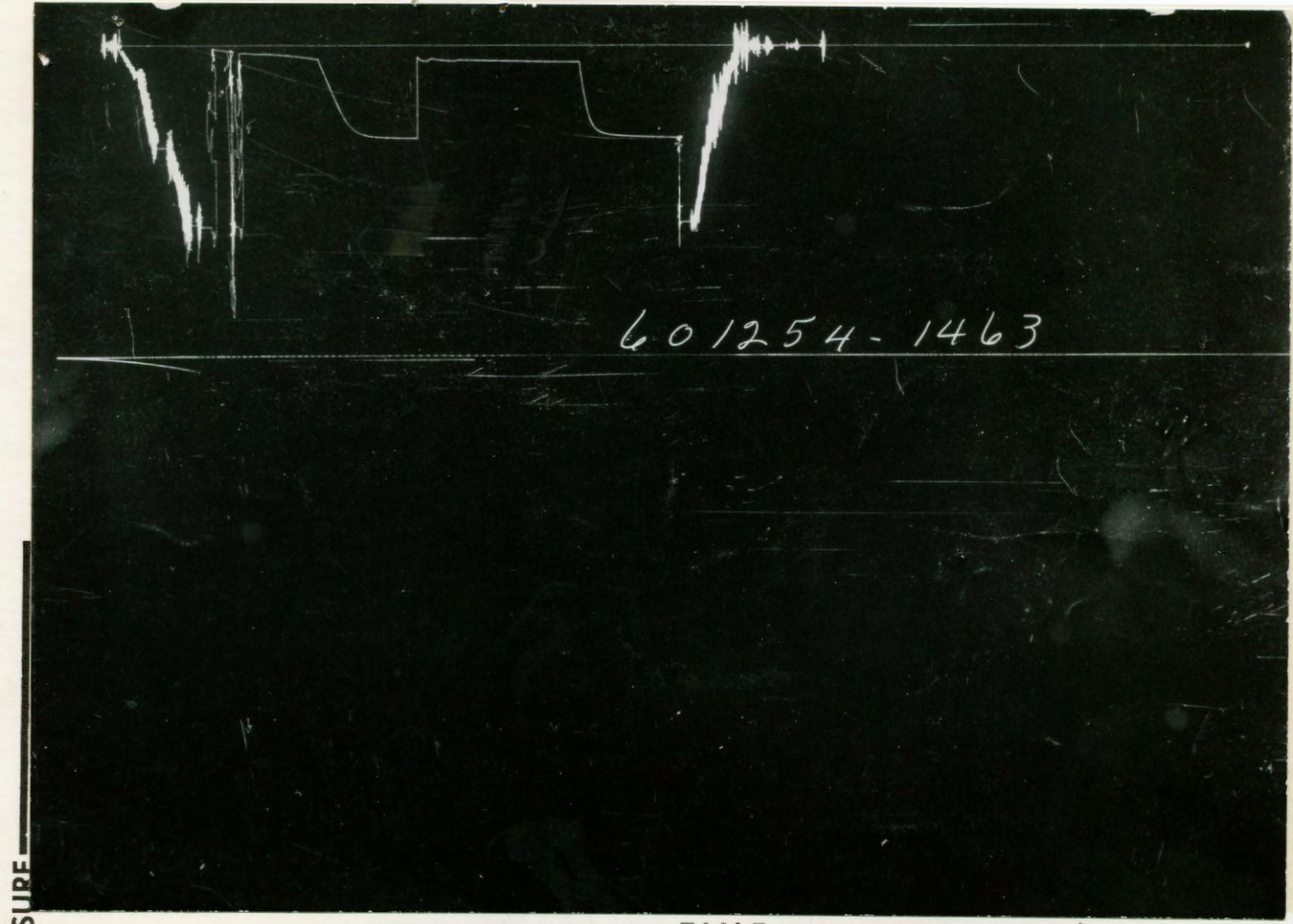


REC'D AUG 9 1979

mailed John Cecil copy 11/14/80

HALLIBURTON SERVICES

DUNCAN, OKLAHOMA



Each Horizontal Line Equal to 1000 p.s.i.

FLUID SAMPLE DATA				Date	8-3-73	Ticket Number	601254
Sampler Pressure _____ P.S.I.G. at Surface				Kind of Job	OPEN HOLE	Halliburton District	GREAT BEND
Recovery: Cu. Ft. Gas _____				Tester	MR. MOORE	Witness	MR. FOLEY
cc. Oil _____				Drilling Contractor	STERLING DRILLING COMPANY	DR	S
cc. Water _____				EQUIPMENT & HOLE DATA			
cc. Mud _____				Formation Tested	Towanda		
Tot. Liquid cc. _____				Elevation	1567'	GL	Ft.
Gravity _____ ° API @ _____ ° F.	RESISTIVITY			Net Productive Interval	4'	Ft.	
Gas/Oil Ratio _____ cu. ft./bbl.	CHLORIDE CONTENT			All Depths Measured From	Ground Level		
Recovery Water _____ @ _____ ° F. _____ ppm				Total Depth	1110'	Ft.	
Recovery Mud _____ @ _____ ° F. _____ ppm				Main Hole/Casing Size	6½"		
Recovery Mud Filtrate _____ @ _____ ° F. _____ ppm				Drill Collar Length	174.12'	I.D. 2.50"	
Mud Pit Sample _____ @ _____ ° F. _____ ppm				Drill Pipe Length	889'	I.D. 2.441"	
Mud Pit Sample Filtrate _____ @ _____ ° F. _____ ppm				Packer Depth(s)	1080'	Ft.	
Mud Weight 10.3 vis 33 cp				Depth Tester Valve	1067'	Ft.	
TYPE		AMOUNT		Depth Back Pres. Valve	Surface Choke	1/4"	Bottom Choke 5/8"
Cushion							
Recovered	90	Feet of gas cut mud, slightly thin.					
Recovered		Feet of					
Recovered		Feet of					
Recovered		Feet of					
Recovered		Feet of					
Remarks	SEE PRODUCTION TEST DATA SHEET						
TIME GIVEN AND RECORDED DOES NOT AGREE.							
TEMPERATURE	Gauge No.	1463	Gauge No.	396	Gauge No.		TIME
	Depth:	1072' Ft.	Depth:	1105' Ft.	Depth:		
Est. 80 °F.	12 Hour Clock		12 Hour Clock		Hour Clock	Tool . A.M.	
	Blanked Off No		Blanked Off Yes		Blanked Off	Opened 7:31-- P.M.	
Actual °F.	Pressures		Pressures		Pressures		Tool - A.M.
	Field	Office	Field	Office	Field	Office	Closed 12:16 P.M.
Initial Hydrostatic		586	595	600			Reported Minutes
First Period	Flow Initial	11	31	38			Computed Minutes
	Flow Final	46	63	55			
	Closed in	301	305	307			60 60
Second Period	Flow Initial	38	47	55			
	Flow Final	54	63	63			145 99
	Closed in	299	297	304			60 60
Third Period	Flow Initial						
	Flow Final						
Closed in							
Final Hydrostatic		569	587	586			

Legal Location
Sec. - Twp. - Rng.

VONDRA
Lease Name

1
Well No.

3
Test No.

1080' - 1110'
Tested Interval

Field Area
WILDCAT

County ELLSWORTH

GLEN RUPE
Lease Owner/Company Name

State KANSAS

TIGHT HOLE

Casing perms. _____ Bottom choke 5/8" Surf. temp. _____ °F Ticket No. 601254
 Gas gravity _____ Oil gravity _____ GOR _____
 Spec. gravity _____ Chlorides _____ ppm Res. _____ @ _____ °F

Date Time	a.m. p.m.	Choke Size	Surface Pressure psi	Gas Rate MCF	Liquid Rate BPD	Remarks
7:21	AM					Tool on bottom
7:31						Tool open with a very weak blow, died in 2 minutes, flush tool. Tool closed after 10 minute open and reopened after 5 minutes with a very weak blow died in 2 minutes, 10 minute later, start blow again-good blow.
8:36						Closed tool
9:36						Tool reopened with a good blow, gas to surface in 10 minutes.
		1/4"	14" of water	6,330 cu. ft.		Gauged after 70 minutes of second flow
		"	17" " "	6,930 cu. ft.		" " 75 " " " "
		"	18" " "	7,120 cu. ft.		" " 80 " " " "
		"	19" " "	7,320 cu. ft.		" " 85 " " " "
		"	20" " "	7,521 cu. ft.		" " 90 " " " "
		"	22" " "	7,888 cu. ft.		" " 95 " " " "
		"	23" " "	7,905 cu. ft.		" " 100 " " " "
		"	25" " "	7,939 cu. ft.		" " 105 " " " "
11:16						Closed tool
12:16						Come off bottom

	O. D.	I. D.	LENGTH	DEPTH
Reversing Sub				
Water Cushion Valve				
Drill Pipe	2 7/8"	2.441"	889'	
Drill Collars	5 1/4"	2.50"	174.12'	
Handling Sub & Choke Assembly				
Dual CIP Valve	3.88"	.87"	64.97"	
Dual CIP Sampler				
Hydro-Spring Tester	3.90"	.62"	61.12"	1067'
Multiple CIP Sampler				
Extension Joint				
AP Running Case	3"	3.03"	48.80"	1072'
Hydraulic Jar				
VR Safety Joint				
Pressure Equalizing Crossover				
Packer Assembly	5 1/2"	.37"	60.00"	1080'
Distributor				
Packer Assembly				
Flush Joint Anchor	3"	1.25"	23'	
Pressure Equalizing Tube				
Blanked-Off B.T. Running Case	3"	3.03"	59.20'	1105'
Drill Collars				
Anchor Pipe Safety Joint				
Packer Assembly				
Packer Assembly				
Anchor Pipe Safety Joint				
Side Wall Anchor				
Drill Collars				
Flush Joint Anchor				
Blanked-Off B.T. Running Case				

D.S.T. Report Distribution



A Division of Halliburton Company

FORM 1509R3

DUNCAN, OKLAHOMA 73533

GLEN RUPE

Company Name - - Lease Owner

Requested Distribution of Completed D.S.T. Report Folder
for Ticket No. 601254

(This Order Must Be Filled Out and Signed By Company Representative)

Company GLEN RUPE
Orig. Chart

ATT.

5

& Reports

P.O. BOX 925 OLIVE GARVEY BLDG
STREET & NO. BUILDING
CITY STATE WICHITA, KANSAS
ZIP CODE NUMBER

Company



Reports

ATT.

P.O. BOX
STREET & NO.
BUILDING

CITY
STATE

ZIP CODE NUMBER

Company



Reports

ATT.

P.O. BOX
STREET & NO.
BUILDING

CITY
STATE

ZIP CODE NUMBER

Company



Reports

ATT.

P.O. BOX
STREET & NO.
BUILDING

CITY
STATE

ZIP CODE NUMBER

Company



Reports

ATT.

P.O. BOX
STREET & NO.
BUILDING

CITY
STATE

ZIP CODE NUMBER

Owner - Operator - or His Agent

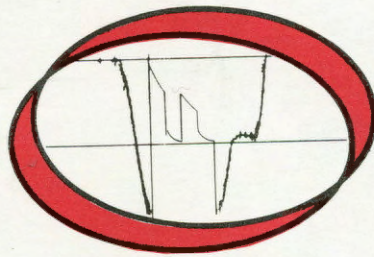
SIGNED DICK FOLEY, Agent

Send 1st, 2nd and 3rd Copy with Charts

(Use Additional Sheets When Necessary)

Formation Testing Service Report

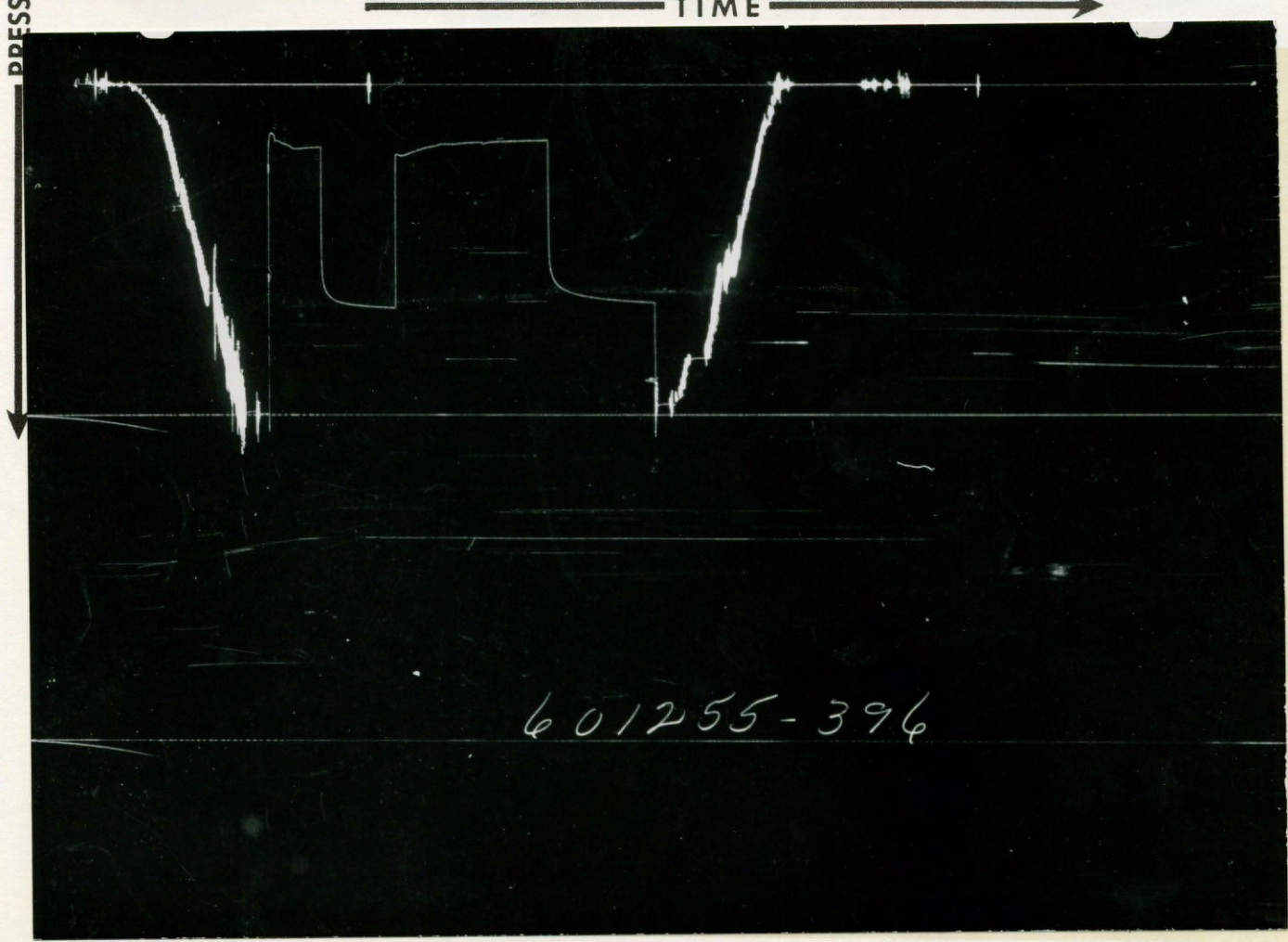
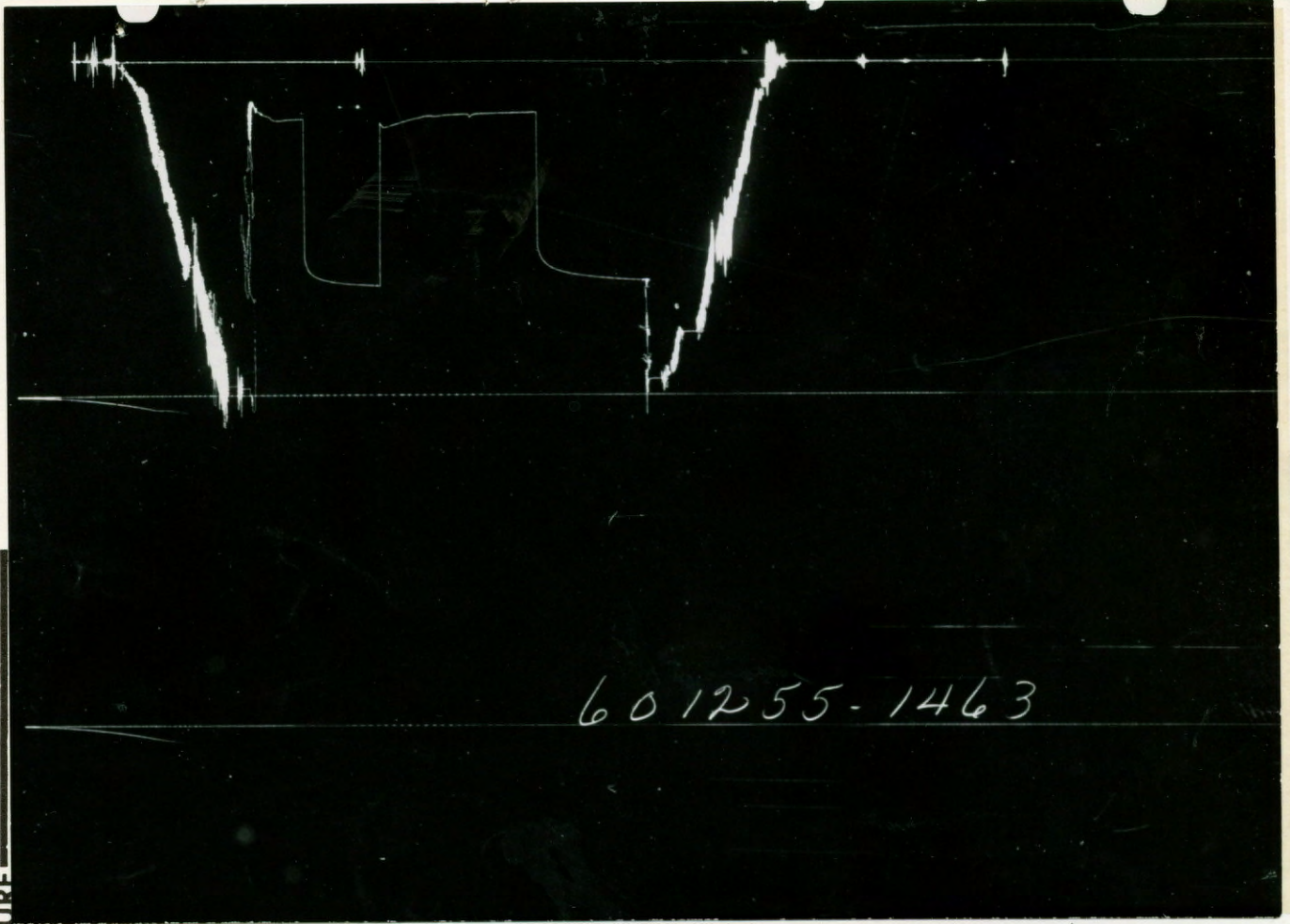
VONDRA
Lease Name
1
Well No.
4
Test No.
1746'-1775'
Tested Interval
GLEN RUPE
Lease Owner/Company Name



mailed copy John Ceil 12/12/80

HALLIBURTON SERVICES

DUNCAN, OKLAHOMA



Each Horizontal Line Equal to 1000 p.s.i.

FLUID SAMPLE DATA	Date 8-5-73	Ticket Number 601255
Sampler Pressure _____ P.S.I.G. at Surface	Kind of Job OPEN HOLE	Halliburton District GREAT BEND
Recovery: Cu. Ft. Gas _____ cc. Oil _____ cc. Water _____ cc. Mud _____ Tot. Liquid cc. _____	Tester MR. MOORE	Witness MR. FOLEY
Gravity _____ ° API @ _____ °F.	Drilling Contractor STERLING DRILLING COMPANY	DR S
Gas/Oil Ratio _____ cu. ft./bbl.	EQUIPMENT & HOLE DATA	
RESISTIVITY	Formation Tested Tarkio	
CHLORIDE CONTENT	Elevation 1567' GL	Ft.
Recovery Water _____ @ _____ °F. _____ ppm	Net Productive Interval 7'	Ft.
Recovery Mud _____ @ _____ °F.	All Depths Measured From Ground Level	
Recovery Mud Filtrate _____ @ _____ °F. _____ ppm	Total Depth 1775'	Ft.
Mud Pit Sample _____ @ _____ °F.	Main Hole/Casing Size 6 1/2"	
Mud Pit Sample Filtrate _____ @ _____ °F. _____ ppm	Drill Collar Length 174.12'	I.D. 2.50"
Mud Weight 10.3 vis 36 cp	Drill Pipe Length 1555'	I.D. 2.441"
	Packer Depth(s) 1746'	Ft.
	Depth Tester Valve 1734'	Ft.

TYPE	AMOUNT	Depth Back	Surface	Bottom
Cushion		Ft. Pres. Valve	Choke 1"	Choke 5/8"

Recovered	Feet of	Meo. From Tester Valve
Recovered	Feet of	
Recovered	Feet of	
Recovered	Feet of	
Recovered	Feet of	
Recovered	Feet of	

Remarks **SEE PRODUCTION TEST DATA SHEET**

TEMPERATURE	Gauge No. 1463		Gauge No. 396		Gauge No.		TIME	
	Depth:	1739 Ft.	Depth:	1770 Ft.	Depth:	Ft.		
Est. 82 °F.	12 Hour Clock		12 Hour Clock		Hour Clock		Tool	A.M.
	Blanked Off No		Blanked Off Yes		Blanked Off		Opened	02:48 - P.M.
Actual °F.	Pressures		Pressures		Pressures		Tool	A.M.
	Field	Office	Field	Office	Field	Office	Closed	06:35 - P.M.
Initial Hydrostatic		980	970	997			Reported,	Computed
							Minutes	Minutes
First Period	Flow Initial	142	133	183				
	Flow Final	172	188	190			30	31
	Closed in	671	681	676			45	44
Second Period	Flow Initial	184	219	213				
	Flow Final	151	172	170			90	90
	Closed in	655	673	660			62	62
Third Period	Flow Initial							
	Flow Final							
	Closed in							
Final Hydrostatic		951	970	968				

Legal Location
Sec. - Twp. - Rng.

16-16-7/C-NE-1/4

VONDRA

Lease Name

1 Well No.

4 Test No.

1746'-1775'
Tested Interval

Field Area
WILD CAT

County

ELLISWORTH

State

KANSAS

GLEN RUPE

Lease Owner/Company Name

Casing perfs. _____ Bottom choke 5/8" Surf. temp. _____ °F Ticket No. 601255
 Gas gravity _____ Oil gravity _____ GOR _____
 Spec. gravity _____ Chlorides _____ ppm Res. _____ @ _____ °F

Date Time	a.m. p.m.	Choke Size	Surface Pressure psi	Gas Rate MCFX	Liquid Rate BPD	Remarks
02:38						Tool on bottom
02:48						Opened tool with a strong blow. Gas to surface in 2 minutes.
02:53		1½"	3#	634,000 cu. ft.		
02:58		"				Spraying mud
03:03		"	4	764,000		Spraying mud
03:18		"	4.5	814,000		Spraying mud, Closed tool.
04:03						Reopened tool with a strong blow
04:08		"	5.75	920,000		Spray mud
04:13		"	5.50	908,000		"
04:18		"	5.50	908,000		"
04:28		"	5.50	908,000		"
04:38		"	5.25	885,000		Trap gas sample Spray mud
04:48		"	5.0	863,000		Spray mud
05:03		"	5.25	885,000		"
05:13		"	5.25	885,000		"
05:23		"	5.25	885,000		"
05:33		"	5.25	885,000		"
05:33						Closed tool
06:35						Come off bottom

Gauge No. 1463			Depth 1739'			Clock No. -			12 hour		Ticket No. 601255				
First Flow Period			First Closed In Pressure			Second Flow Period		Second Closed In Pressure			Third Flow Period		Third Closed In Pressure		
Time Defl. .000"	PSIG Temp. Corr.		Time Defl. .000"	Log $\frac{t+\theta}{\theta}$	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	Log $\frac{t+\theta}{\theta}$	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	Log $\frac{t+\theta}{\theta}$	PSIG Temp. Corr.
0	.000	142	.000	---	172	.000	184	.000	---	151					
1	.0401	153*	.0134	1.216	618**	.1012	178	.0409	1.320	609***					
2	.0735	166	.0334	.857	639	.2024	163	.0682	1.112	621					
3	.1069	177	.0534	.688	648	.3036	158	.0955	.979	629					
4	.1403	175	.0734	.582	654	.4048	155	.1228	.882	634					
5	.1737	173	.0934	.507	657	.5069	153	.1501	.808	638					
6	.2070	172	.1134	.451	661	.6070	151	.1774	.747	641					
7			.1334	.407	662			.2047	.697	644					
8			.1534	.371	665			.2320	.654	646					
9			.1734	.341	666			.2593	.617	648					
10			.1934	.316	667			.2866	.584	650					
11			.2134	.294	669			.3139	.555	651					
12			.2334	.276	669			.3412	.530	653					
13			.2534	.259	670			.3685	.506	654					
14			.2734	.245	671			.3958	.485	655					
15			.2940	.231	671			.4230	.466	655					

Gauge No. 396			Depth 1770'			Clock No. -			hour 12	
Time Defl. .000"	PSIG Temp. Corr.		Time Defl. .000"	Log $\frac{t+\theta}{\theta}$	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	Log $\frac{t+\theta}{\theta}$	PSIG Temp. Corr.
0	.000	183	.000	---	190	.000	213	.000	---	170
1	.0397	171*	.0133	1.215	613**	.0992	196	.0404	1.318	611***
2	.0728	183	.0332	.856	640	.1984	181	.0673	1.110	622
3	.1059	196	.0531	.687	653	.2976	177	.0942	.977	631
4	.1390	194	.0730	.581	659	.3968	174	.1211	.881	636
5	.1721	191	.0929	.506	663	.4960	171	.1480	.807	641
6	.2050	190	.1128	.450	665	.5950	170	.1749	.746	644
7			.1327	.406	668			.2018	.696	647
8			.1526	.370	670			.2287	.653	650
9			.1725	.340	671			.2556	.616	651
10			.1924	.315	672			.2825	.583	654
11			.2123	.294	674			.3094	.555	655
12			.2322	.275	675			.3363	.529	656
13			.2521	.258	676			.3632	.506	658
14			.2720	.244	676			.3901	.484	659
15			.2930	.230	676			.4170	.465	660

Reading Interval 5

3

15

4

Minutes

REMARKS: * First interval equal to 6 minutes **-2 minutes ***-6 minutes

SPECIAL PRESSURE DATA

TICKET NO.	601255	
BT GAUGE NO.	INITIAL	FINAL
1463	⊙	⊙
396	◇	◇



580 600 620 640 PSIG 660 680 700

EXTRAPOLATED PRESSURE GRAPH

Gas Production

B.T. Gauge Numbers			1463	396	Ticket Number		601255
Initial Hydrostatic			980	997	Elevation		1567 ft.
Final Hydrostatic			951	968	1st Flow		814 MCF
1st Flow	Initial	Time	142	183	2nd Flow		885 MCF
	Final	31	172	190	3rd Flow		- MCF
Closed In Pressure			671	676	Hole Size		6.25 in.
2nd Flow	Initial	Time	184	213	Footage Tested Net		7 ft.
	Final	90	151	170	Mud Weight		10.3 lbs./gal.
	Closed In Pressure			655	660	Gas Viscosity Est.	
3rd Flow	Initial	Time			Gas Gravity		0.6
	Final				Gas Compressibility		0.9
	Closed In Pressure					Temperature	
Extrapolated Static Pressure			1st	683	688		
			2nd	682	686		
			3rd	-	-		
Slope P/10			1st	633	638		
			2nd	626	630		
			3rd	-	-		

Remarks: Calculations based on reported rates and net pay.
 The calculated results based on the final flow rate, pressure and extrapolated pressure in view of the longer final flow period appear to be the more reliable.

SUMMARY

PRODUCT		EQUATION	B.T. Gauge No. 1463			B.T. Gauge No. 396			UNITS
			FIRST	SECOND	THIRD	FIRST	SECOND	THIRD	
Transmissibility		$\frac{Kh}{\mu} = \frac{1637 Q_r ZT}{m}$	9878.4	9648.0		9803.9	9589.3		md. ft. cp
Theoretical Flow Capacity		$Kh = \frac{Kh}{\mu} \mu$	128.42	125.42		127.45	124.66		md. ft.
Average Effective		$K = \frac{Kh}{h}$	-	-		-	-		md.
Permeability		$K_1 = \frac{Kh}{h_1}$	18,346	17,918		18,208	17,809		md.
Indicated Flow Capacity		$(Kh)_s = \frac{3200 Q_r \mu ZT \text{Log}(0.472 b/r_w)}{P_s^2 - P_r^2}$	63,326	79,958		63,214	80,017		md. ft.
Damage Ratio		$DR = \frac{\text{Theo. Flow Cap}}{\text{Indicated Flow Cap}} \frac{Kh}{(Kh)_s}$	2.02	1.56		2.01	1.55		-
Indicated Flow Rate		$OF_1 = \frac{Q_r P_s^2}{P_s^2 - P_r^2} \text{ Max.}$	869	930		881	943		MCFD
		$OF_2 = \frac{Q_r P_s}{\sqrt{P_s^2 - P_r^2}} \text{ Min.}$	841	907		847	913		MCFD
Theoretical Potential Rate		$OF_3 = OF_1 DR \text{ Max.}$	1762	1460		1776	1469		MCFD
		$OF_4 = OF_2 DR \text{ Min.}$	1706	1424		1708	1423		MCFD
Approx. Radius of Investigation		$b \approx \sqrt{Kt} \text{ or } \sqrt{Kt_0}$	-	-		-	-		ft.
		$b_1 \approx \sqrt{K_1 t} \text{ or } \sqrt{K_1 t_0}$	24.1	46.8		24.0	46.6		ft.
Potentiometric Surface *		$\text{Pot.} = (EI - GD) + (2.319 P_s)$	1412	1410		1392	1388		ft.

NOTICE: These calculations are based upon information furnished by you and taken from Drill Stem Test pressure charts, and are furnished you for your information. In furnishing such calculations and evaluations based thereon, Halliburton is merely expressing its opinion. You agree that Halliburton makes no warranty express or implied as to the accuracy of such calculations or opinions, and that Halliburton shall not be liable for any loss or damage, whether due to negligence or otherwise, in connection with such calculations and opinions.

	O. D.	I. D.	LENGTH	DEPTH
Reversing Sub				
Water Cushion Valve				
Drill Pipe	2 7/8"	2.441"	1555'	
Drill Collars	5 1/2"	2.50"	174.12'	
Handling Sub & Choke Assembly				
Dual CIP Valve	3.88"	.87"	64.97"	
Dual CIP Sampler				
Hydro-Spring Tester	3.90"	.62"	61.12"	1734'
Multiple CIP Sampler				
Extension Joint				
AP Running Case	3"	3.03"	48.80"	1739'
Hydraulic Jar				
VR Safety Joint				
Pressure Equalizing Crossover				
Packer Assembly	5 1/4"	.37"	60.00"	1746'
Distributor				
Packer Assembly				
Flush Joint Anchor	3"	1.25"	22'	
Pressure Equalizing Tube				
Blanked-Off B.T. Running Case	3"	3.03"	59.20"	1770'
Drill Collars				
Anchor Pipe Safety Joint				
Packer Assembly				
Packer Assembly				
Anchor Pipe Safety Joint				
Side Wall Anchor				
Drill Collars				
Flush Joint Anchor				
Blanked-Off B.T. Running Case				

D.S.T. Report Distribution



A Division of Halliburton Company

FORM 1509R3

DUNCAN, OKLAHOMA 73533

GLEN RUPE

Company Name - - Lease Owner

Requested Distribution of Completed D.S.T. Report Folder
for Ticket No. 601255

(This Order Must Be Filled Out and Signed By Company Representative)

Company GLEN RUPE
Orig. Chart

ATT. 5
& Reports
P.O. BOX STREET & NO. 925 OLIVE GARVEY BLDG
BUILDING
CITY STATE WICHITA, KANSAS
ZIP CODE NUMBER

Company

ATT.
P.O. BOX STREET & NO. BUILDING
Reports CITY STATE
ZIP CODE NUMBER

Company

ATT.
P.O. BOX STREET & NO. BUILDING
Reports CITY STATE
ZIP CODE NUMBER

Company

ATT.
P.O. BOX STREET & NO. BUILDING
Reports CITY STATE
ZIP CODE NUMBER

Company

ATT.
P.O. BOX STREET & NO. BUILDING
Reports CITY STATE
ZIP CODE NUMBER

Owner - Operator - or His Agent

SIGNED DICK FOLEY, Agent

Send 1st, 2nd and 3rd Copy with Charts

(Use Additional Sheets When Necessary)