Exhibit: PE- 59

CHK Reservoir Engineering Evidence Backup Rebuttal

REASONABLE RESERVOIR PRESSURE DATA POINTS

These pressures may be the same considering the resolution of DST measurement.

Well	Date	BHP(psi)	Source / Comment
CC State #1	9/19/2004	7090	Kick in zone of interest @ 11462' SIDPP 1000 w/ 11.8 ppg mud
State WEL Com #1	11/10/1969	7060	DST - FSIP
	12/10/1980	4875	Dwights - Calc f/ SITP 3750
	9/10/1986	3175	Dwights - Calc f/ SITP 2373 (After shut in)
	7/16/1987	6326	Dwights - Calc f/ SITP 5013 (After shut in) Questionable
	11/18/1998	2561	Dwights - Calc f/ SITP 1914
	8/5/1998	2296	Dwights - Calc f/ SITP 1720
State WEK #1	4/15/1967	7491	DST - ISIP
	9/13/1987	6543	Dwights - Calc f/ SITP 5138
	10/10/1980	5019	Dwights - Calc f/ SITP 3810
	10/12/1998	330	Dwights - Calc f/ SITP 254 (After shut in) Questionable
	8/3/1998	1006	Dwights - Calc f/ SITP 760 (After shut in)
State H 15 #1	4/19/1976	7743	Dwights - Calc f/ SITP 6270
P Q Osudo State #2	12/17/2003	6667	PBU test - Type curve
P Q Osudo State #1	2/2/1990	6379	PBU test - Horner analysis - no type curve
Hunger Buster State #3	7/20/2005	5783	Calc from SITP 4300 psi May not be stabilized pressure
Osudo 9 State Com #1	3/15/2005	5951	Calc from SITP 4425. Not stabilized. Still building 75 psi per day. BHP is higher than 5951
K F 4 State #1		6595	Hearing notes
	1/18/2006	6616	Calc from SITP 5150
North Wilson Deep Unit #1	11/20/1964	6715	Dwights - Calc f/ SITP 5500
North Wilson Deep Unit #2	1/30/1966	6170	DST - ISIP and FSIP
	12/17/1966	6593	Dwights - Calc f/ SITP 5413
New Mexico DQ State #1	9/26/1974	6633	Dwights - Calc f/ SITP 5263

Samson accepts MW calculation on this well

22 BHP points in public DB, CHK used ALL 22 pressures

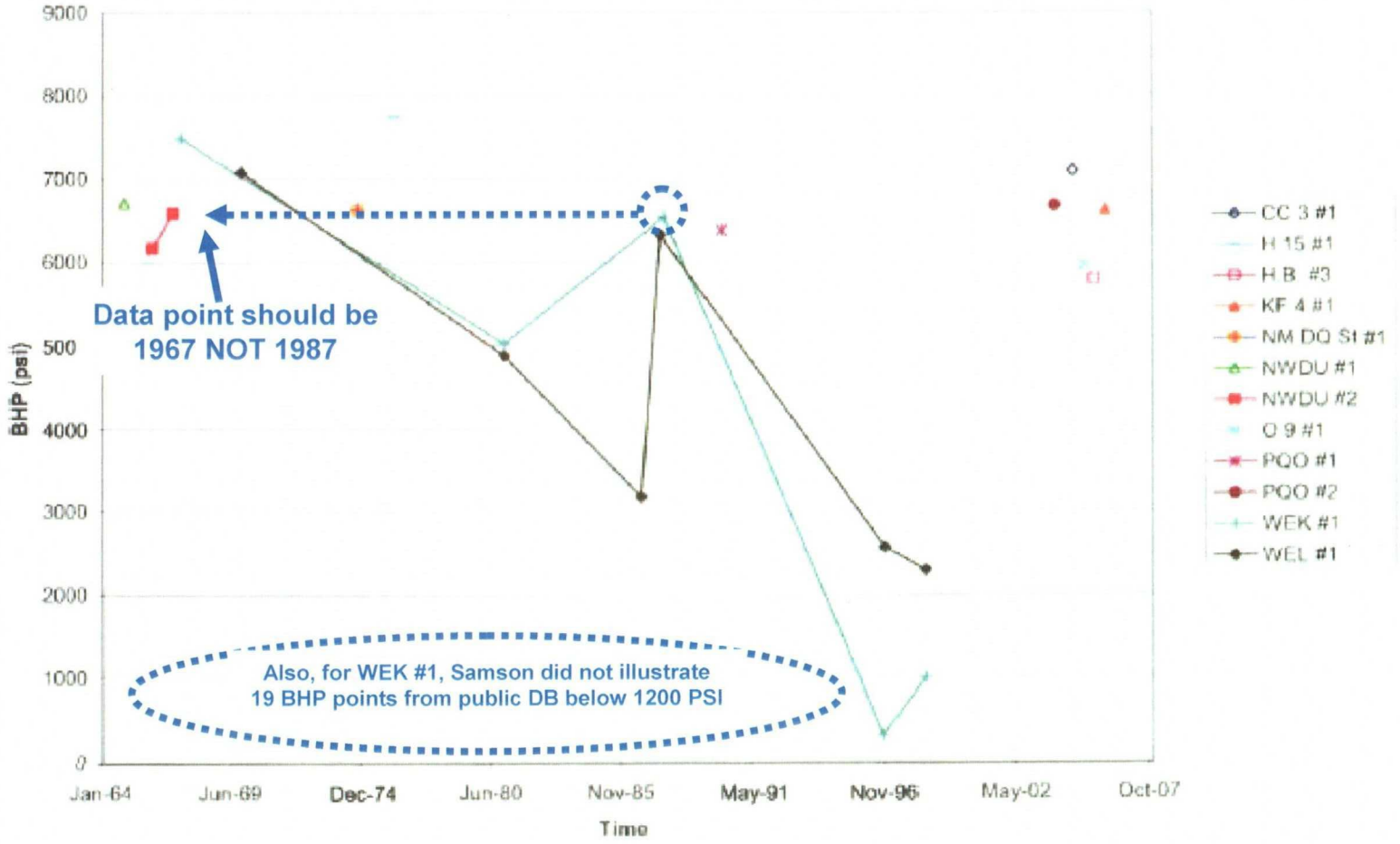
24 BHP points in public DB, CHK used ALL 24 pressures

Should read 9/13/1967 NOT 1987

CHK comments in BLUE

Samson Exhibit 45
NMOCD Case Nos. 13492/13493

Reservoir Pressure Data Points



Samson Exhibit 46
NMOCD Case Nos. 13492/13493

CHK comments in BLUE

Exhibit: PE- 62

Duplication of Exhibit 38

--- Samson comments

Label	Section	Well	PBD	Cum Gas (BCF)		
1	Sec 15	WEK 1	May-67	6.4	DST 7354# BHP	DST 7491 ISIP.
2	Sec 10	WEL Com 1	Jan-70	2.9	DST 7080# BHP	Possible depletion from WEK 1 to the south which was drilled 2 yrs prior
3	Sec 15	State 15 1	Apr-75	0.41	Edge Well, Little Communication 7835# BHP Dwights	No communication with any of the offsets
4	Sec 16	P Q Osudo 1	Jan-81	0.65	Came in Lower Pressure, Dropped to the WEK 1 Profile. 5325# BHP Dwights	BHP from PBU test is 5350 psi and perm is 0.02 md. No relationship to WEK profile
5	Sec 3	CC State 3 1	Jan-04	0.002	Mud Weight 7350#, 30 days later 12540#/150 hr Bombl Ind Reservoir, Dryhole, Cannot be Depleted by WEL Com 1	Mud weight valid for lack of zone of interest which occurred on this well. BHP 7000 psi. Same initial pressure as WEL
6	Sec 9	Osudo State 9 1	Mar-05	7	Mud Weight Calc 8301# BHP	Mud weight alone not valid indication of reservoir pressure Calculated BHP 9051 psi
7	Sec 9	Hunger Buster 3 State	Jun-05	0	Mud Weight Calc 8627# BHP	Mud weight alone not valid indication of reservoir pressure Calculated BHP 9728 psi
8	Sec 10	State WEL Com #2	Jul-05	0	Apache Dryhole	No EW communication to Osudo well
9	Sec 4	KF 4 State 1	Aug-05	0	Mud Weight Calc 8803# BHP, Dip is Measured 8535# BHP	Considered virgin pressure. Not in communication with other wells.

Samson Exhibit 51
NMOCD Case Nos. 13482/13483

Duplication of Exhibit 40

Virgin Reservoir Pressure in the Morrow Formation was Approximately 7000#

			~7080 psi of 7000 psi first only
Initial Well	**State WEK #1**	**1981** **Sec 15** **Good Reservoir, Good Rates** **6.4 BCF** **80% of Reserves in ~7 Years**	Initial BHP 7405 psi from DST ISIP.
No North South Communication Indication of North south and not East West	**State W E L Com #1**	**Sec 10** **2.9 BCF** **Production Characteristics Much Lower** **7088# Initial BHP DST** **Pressure Data Shows No Communication with W E K #1**	Actually is indication of possible communication because of depletion from WEK 1 well to south, which is north south trend
East West Communication No East West correlation	**Sec 15-16 POU** **State WEK #1** **PQ Osudo State Com #1**	**Development of the East West Reservoir shows Evidence of Pressure** **PQ Osudo 1 came in lower pressure, depleted as WEK #1 profile.**	No relationship to WEK #1. PQ 1 function of low perm. No relationship to WEK #1. PQ 1 BHP data was not available to Chesapeake
East West Communication North south communication	**Osudo State 9 Com (1)** **Hunger Buster** **KF State #1**	**Came in with lower than virgin reservoir pressure.**	Possible north south communication between Osudo State 9 #1 and Hunger Buster. KF 1 is considered virgin pressure and not in communication with any other well. Dry hole east of KF1 does not support east west
No North South Communication No communication can be [illegible]	**CC State #1** **WEL Com #1** **WEL Com #2**	**Apache dryhole negates North South Communication between CC 2 State #1 and WEL Com #1**	Supports north south better than east west. Possible communication between WEL and WEK. CC and WEL came in initial pressure.

[illegible]

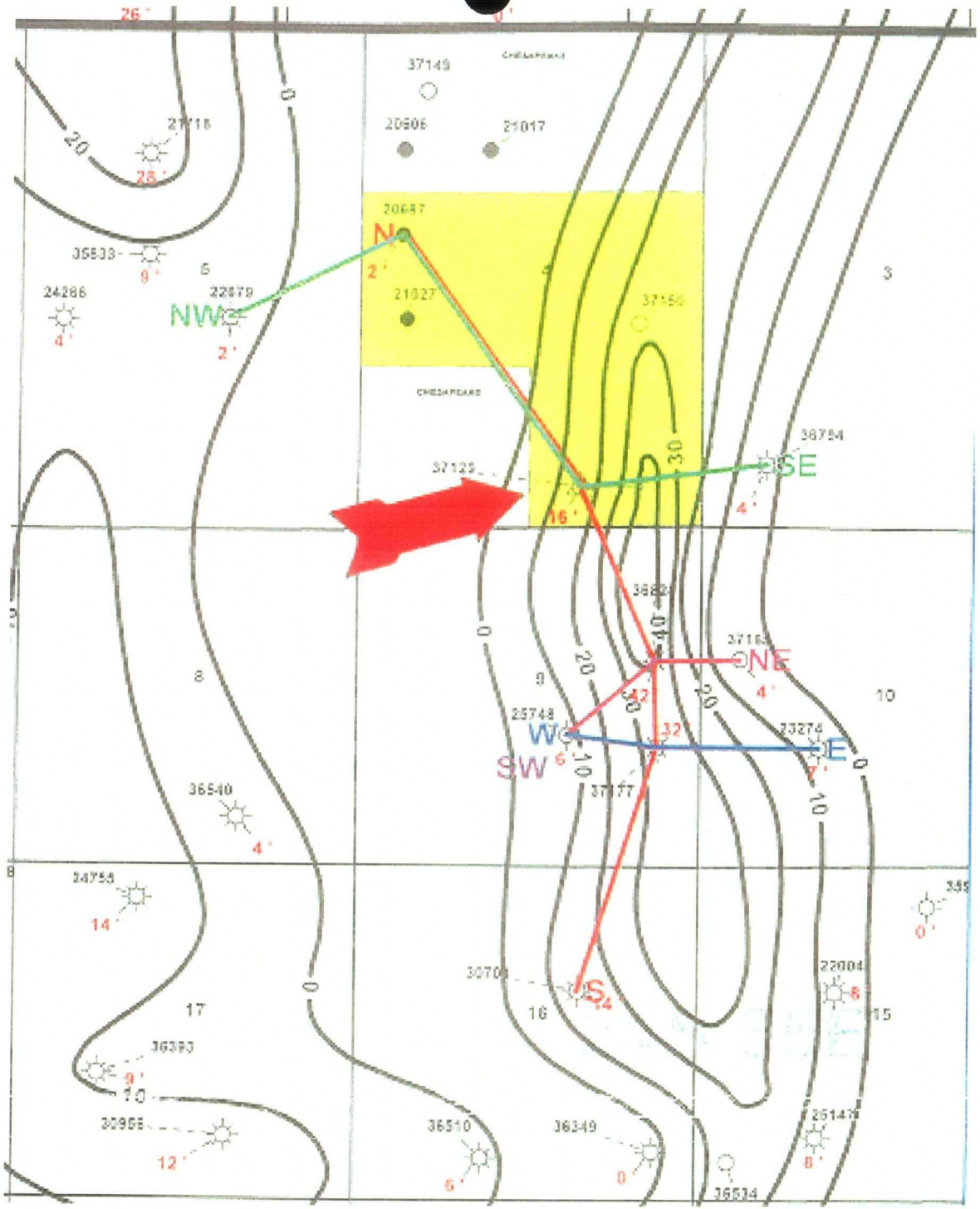
Reservoir Pressure Data Supports CHK's Geological Interpretation and the Published Literature

[illegible]

SAMSON COMMENTS

Samson Exhibit 52
NMOCD Case Nos. 13492/13493

Exhibit: PE- 64



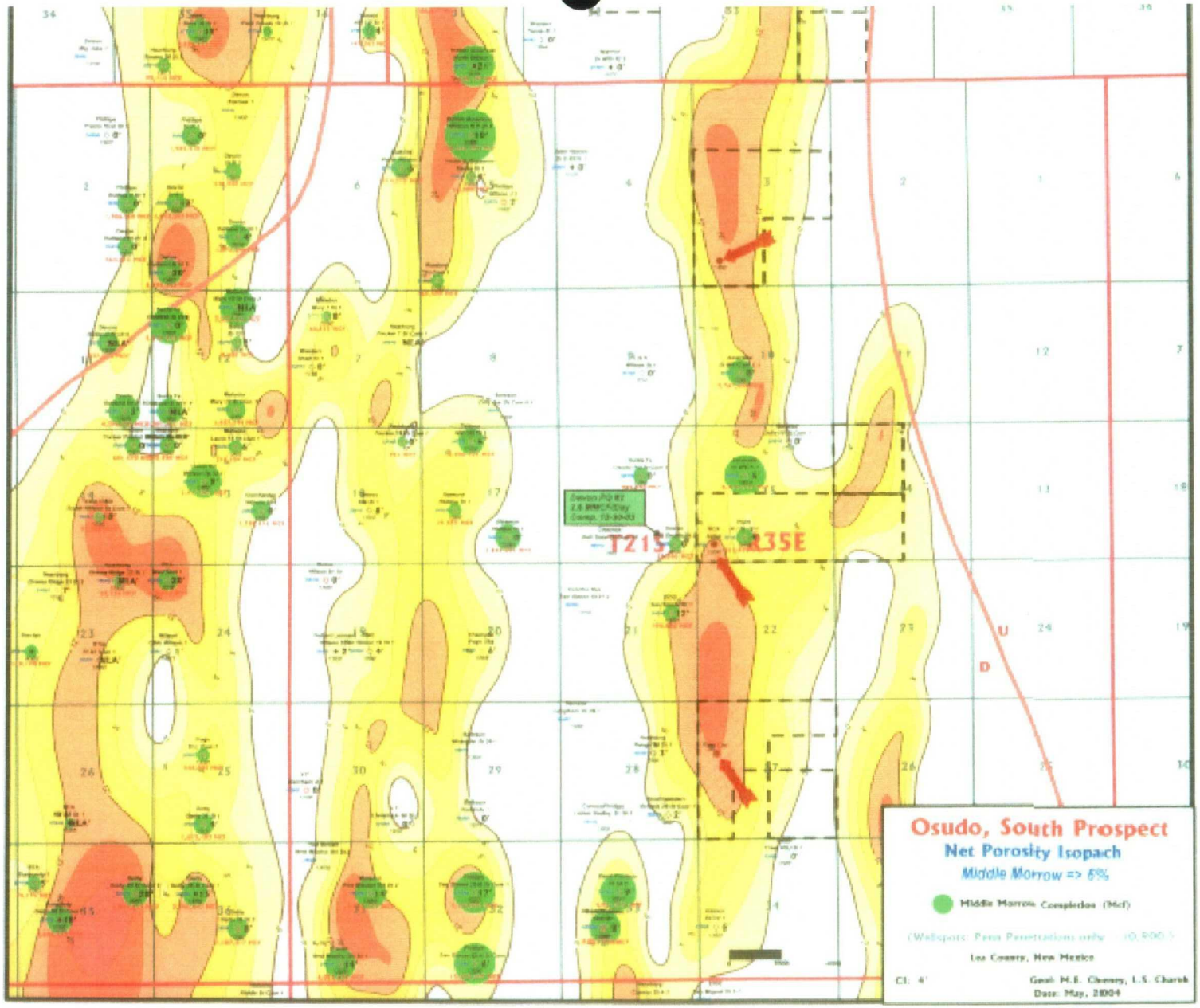

T21S
R35E
Osudo, South Prospect
Net Porosity Isopach
Middle Morrow => 6%
Middle Morrow Completion (Mcf)
Lea County, New Mexico
Date: May, 2004
Ramson Exhibit 54

Exhibit: PE- 66

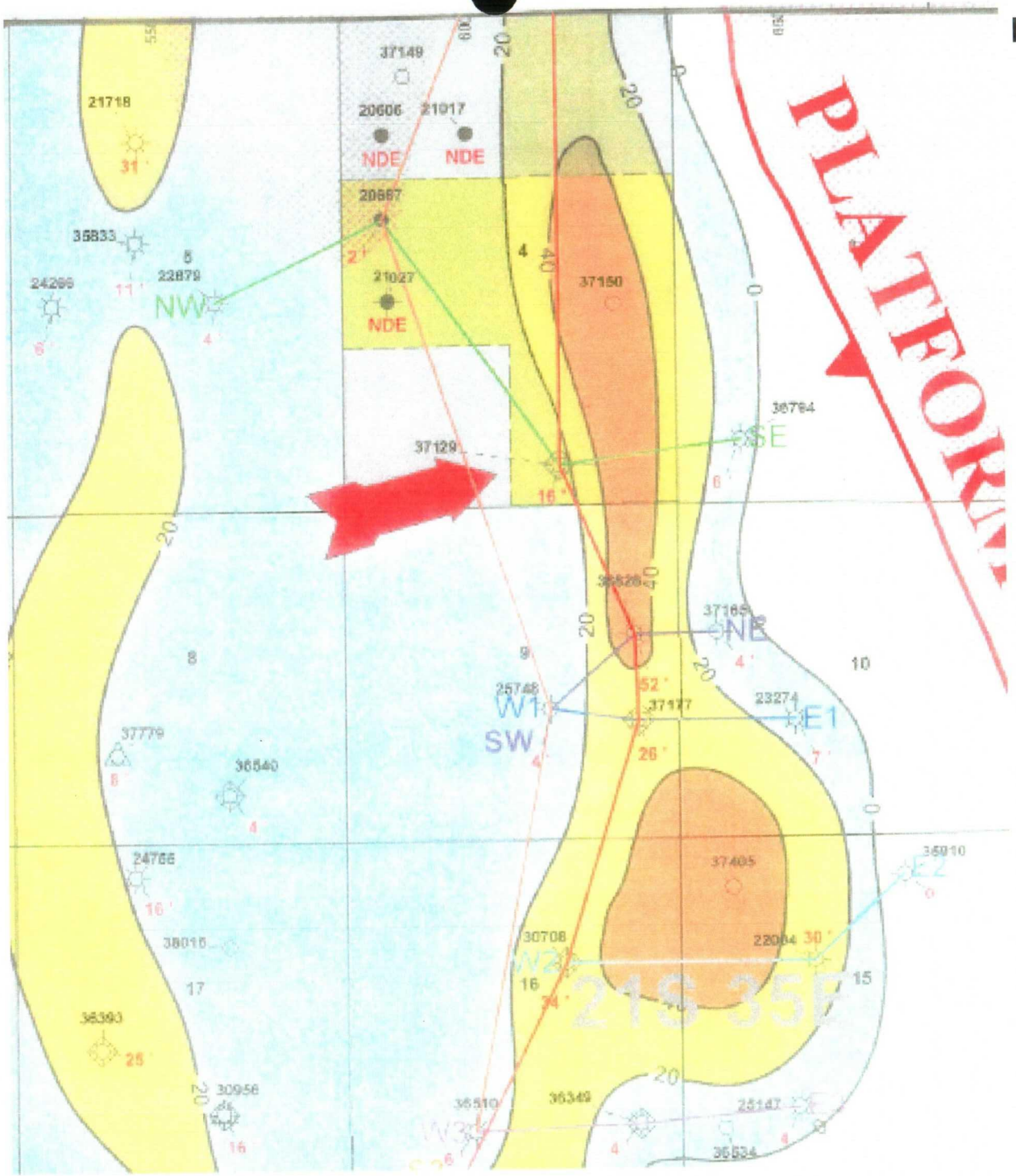


Exhibit: PE- 67

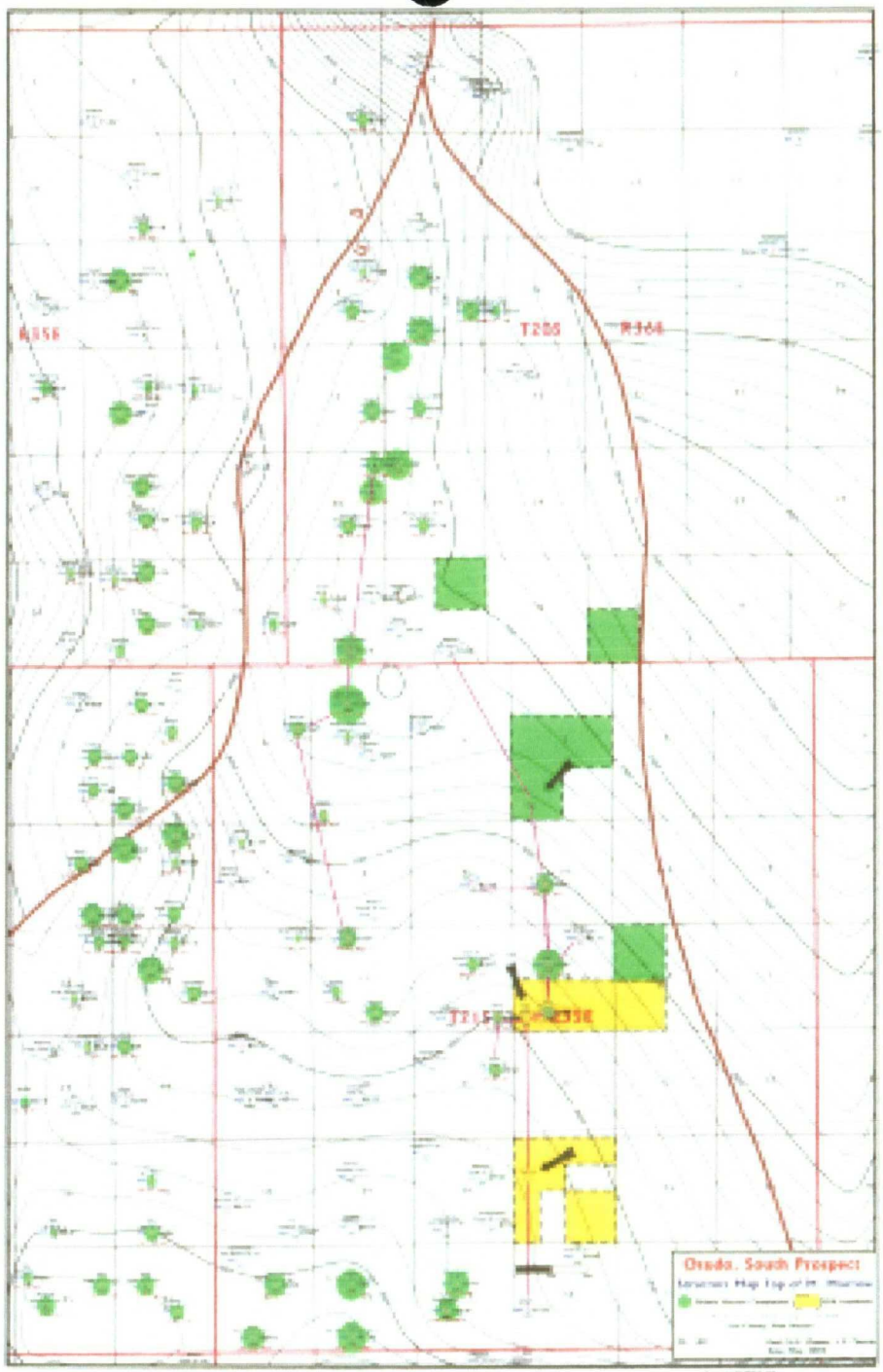


Exhibit: PE- 68

VOLUMETRIC CALCULATION

$Gp = 43{,}560 * Ø * h * A * (1 - Sw) * (Bgi - Bga)/Bgi$

Gp = Gas production or reserves, SCF
Ø = porosity, fraction
h = net pay, feet
A = Drainage area, acres
Sw = water saturation, fraction
Bgi = Initial gas formation volume factor, SCF/RSCF
Bga = Abandonment gas formation volume factor, SCF/RSCF

$Bg = 35.35\ P\ /zT$

P = Pressure, psi
z = Gas deviation factor
T = Reservoir temperature, °R

(Bgi - Bga)/ Bgi = Recovery factor

Samson Exhibit 50 A
NMOCD Case Nos. 13492/13493
Submitted 10/3/06

Exhibit: PE- 69

VOLUMETRIC UNCERTAINTY

Assume 5% Variance in terms

A	160	152	168
h	10	9.5	10.5
Ø	0.1	0.095	0.105
Sw	0.3	0.315	0.285
RF	0.75	0.7125	0.7875
Gp, MMCF	1188	921	1512
% Variance		**22.5%**	**27.3%**

Assume 10% Variance in terms

Pi	6600	6600	6600
A	160	144	176
h	10	9	11
Ø	0.1	0.09	0.11
Sw	0.3	0.33	0.27
RF	0.75	0.675	0.825
Gp, MMCF	1188	787	1731
% Variance		**33.8%**	**45.7%**

Samson Exhibit 50 B
NMOCD Case Nos. 13492/13493
Submitted 10/3/06