O.K HAM- 01-27-16

DOGGR Received AUG -3 2015

WELL ANALYSIS CORPORATION

WATER INJECTION SURVEY

FILING NO.	COMPANY: E & B NATURAL RES. MGMT. CORP. WELL: WNF-I 23 FIELD: WILMINGTON COUNTY: LOS ANGELES	STATE: CALIFORNIA	
	LOCATION: DISTRICT 1	OTHER SVC:	
LAW	API NUMBER: 0403722672 SEC: 19 TWN: 4S RNG: 13W		
PERMANENT DATUM: GROUND LEVEL ELEV:		-ELEVATIONS- KB: Ft. DF: Ft. GL: Ft.	
LOG MEASURED FROM KB 22' ABOVE PERM DATUM			
DRILLING MEASURED FROM			

DATE LOG RAN	07-22-2015	PRESSURE	FLOWING	INJECTION	SHUT-IN
RUN NUMBER	ONE	TUBING PSI		900	
EFFECTIVE DEPTH	5506'	CASING PSI		0	
PICKUP DEPTH	N/A	INJECTION RATE	250 B/D		
BOT LOGGED INT	5393'	OBSERVED RATE	184 B/D		
TOP LOGGED INT	200'	R/A SOURCE	I-131 W		
TYPE OF INJECT	WATER	ACTIVITY	0.4 MCI		
FLUID IN WELL	WATER	HALF LIFE	8.04 DAYS		
FLUID LEVEL	SURFACE				
WELL STATUS	INJECT.		PRODUCTION DATA		
MAX TEMPERATURE	131.7 F.	OIL Gr.	OIL =		
AT DEPTH	5255.0'	GAS Gr.	GAS=		
TEMPERATURE SENS	1 F/DIV.	MPP	BHP =		
LOGGING SPEED	VARIOUS		WATER=		
RECORDED BY	A. GLENN				
WITNESSED BY	M. CHAVEZ				
EMAIL TO	D.UHL				
DEPTH CORRELATION	LINER TOP				

Time / Event			Equipment Data	
On Location	01:20 PM		R/A Ejector Tool	1.375"
Ran in hole	01:40 PM		Collar Locator	1.375"
Begin Survey	02:03 PM		Temperature Tool	1.375"
Pull out of hole	03:15 PM		Gamma Detector	1.375"
Off Location	04:00 PM			

Remarks/Survey Results

SURVEY INDICATES VALID TUBING INTEGRITY AND NO MIGRATION AROUND TOP PERFORATION OR AT THE PACKER.
PLEASE NOTE: STOPPED LOGGING AT 5393' DUE TO PREVIOUSLY GETTING STUCK AT 5423'.

SAND TAG MARKERS: UNAVAILABLE

WATER INJECTION SURVEY - PROFILE A:
5376'-5393' APPROX. 116 B|D 63%
APPROX. 68 B|D 37% EXITING BELOW THE BLI

CASING AND TUBING RECORD

SIZE	WT(#)	FROM	TO	SIZE	WT(#)	FROM	TO
7.000"	23	SURFACE	5364'				
5.000"	18	5294'	5506'				
2.875"	6.5	SURFACE	5209.54'				
2.875"	6.5	5231'	5506'				

STR.	PIPE DIA.	PERFORATIONS
A	5.000"	5376'-5393', 5398'-5416', 5420'-5438', 5443'-5460', 5465'-5483'.
	2.875"	5337'-5506'.
		PACKERS: 5191.68'-5195.66'.

WATER TOOL DIAGRAM

TOP PERF CHECK
SLUG OUT AND BY AT 5318', WAITED 60 SEC.
THEN LOGGED DOWN...

PACKER CHECK
SLUG OUT AND BY AT 5180', WAITED 60 SEC.
THEN LOGGED DOWN...