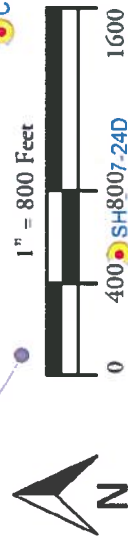


NGL Water Solutions DJ LLC		
SWD #1-8B		
API: 123-29536		
SESE 8-4N-64W		
Weld County		
UIC Facility # 159264		
Form 7 Injection Reporting (8/5/2014)	3/2009-2/2014	
Permit maximum injection pressure	1,510	psi
Actual injection pressure for last year	1,400	psi
Formation Tops-Bottoms	9050-9176	Amazon
	9176-9328	Council Grove
	9563-9728	Missouri
Injection perfs (Forms 5A/7= ACGMI)	9050-9174	Amazon
	9200-9208	Council Grove
	9594-9688	Missouri
Total perf thickness	226	ft
REQUEST TO INCREASE INJECTION		
VOLUME BASED ON 3/8*-MILE RADIUS		
Total injected volume	7,080,066	bbl
Average monthly injected volume	118,011	bbl
Average daily injected volume	3,807	bbl
Permit maximum volume 1/4-mile	10,092,800	bbl
Estimated maximum daily injection volume	10,000	bbl
Unused injection volume as of 8/5/2014	3,012,734	bbl
Months remaining at current inj rate	26	months
Years remaining at current inj rate	2.13	years

*Operator requested 1/2 mile but Diana says we start with 3/8 then go to 1/2 if needed. Stuart concurred 8/6/2014

	$\pi = 3.14159$	
Calculations:	R = radius	
$V = (\pi \times R^2 \times H \times \Phi) / 5.6146$	H = inj interval	
Originally: $10092800 = (\pi \times (1320 \text{ ft})^2 \times 266 \text{ ft} \times \Phi) / 5.6146 \text{ ft}^3 / \text{bbl}$	$\Phi = \text{porosity } \%$	
So, $\Phi = 3.4\%$		
	5.6146 = conversion from ft^3 to bbls	
New 3/8-mile radius = 1980 ft		
$\text{Vol}_{3/8} = (\pi \times (1980 \text{ ft})^2 \times 266 \text{ ft} \times 0.034 \text{ \%}) / 5.6146 \text{ ft}^3 / \text{bbl} =$	19,839,101	bbl





Report)

COGCC Results

3/8 Mile
Radius

No Production within
3/8 mile from Inj zone

Selected Items Report

8/8/2014

Oil and Gas Wells Selected

Filter Results by Formation Include

ACGMI

AMZN

CODL

COUGR

[Filter]

WELL DESCRIPTION

LOCATION ID

LOCATION

WELL INFORMATION

05-123-11114, GEHRING 1
NOBLE ENERGY INC

319354

SESE 8
4N -64W (6)

Sidetrack TD Formation Status
00 6996 CODL PR

05-123-16804, CONQUEST SWD 1-8
NGL WATER SOLUTIONS DJ LLC

329055

SESE 8
4N -64W (6)

Sidetrack TD Formation Status
00 9263 ENRD SI
00 9263 LYNS TA

05-123-18511, GEHRING 8-9/4
NOBLE ENERGY INC

330148

NESE 8
4N -64W (6)

Sidetrack TD Formation Status
00 7071 CODL CM
00 7071 NB-CD PR
00 7071 NBRR CM

05-123-18512, GEHRING 8-15/4
NOBLE ENERGY INC

330149

SWSE 8
4N -64W (6)

Sidetrack TD Formation Status
00 7704 CODL AB
00 7704 JSND AB
00 7704 NB-CD AB
00 7704 NBRR AB

05-123-23038, SWD 1-8A
NGL WATER SOLUTIONS DJ LLC

305484

SESE 8
4N -64W (6)

Sidetrack TD Formation Status
00 9000 LYNS IJ

05-123-29536, SWD 1-8B
NGL WATER SOLUTIONS DJ LLC

302647

SESE 8
4N -64W (6)

Sidetrack TD Formation Status
00 10000 ACGMI IJ
00 10000 AMZN CM
00 10000 COUGR CM
00 10000 FNTN AB
00 10000 MSSR CM

05-123-12289, JOHNSON, VERN 2
NOBLE ENERGY INC

322937

NWSW 9
4N -64W (6)

Sidetrack TD Formation Status
00 7006 CODL PR
00 7006 NBRR PR

05-123-17148, JOHNSON 9-13
NOBLE ENERGY INC

329316

SWSW 9
4N -64W (6)

Sidetrack TD Formation Status
00 7032 CODL CM
00 7032 NB-CD PR
00 7032 NBRR CM

05-123-21325, ALTER C 9-25
NOBLE ENERGY INC

331803

NWSW 9
4N -64W (6)

Sidetrack TD Formation Status
00 7034 CODL CM
00 7034 NB-CD PR
00 7034 NBRR CM

05-123-33386, Mark Alter C16-79HN
NOBLE ENERGY INC

329316

SWSW 9
4N -64W (6)

Sidetrack TD Formation Status
00 11765 NBRR PR

05-123-34721, ALTER C 16-28DX
NOBLE ENERGY INC

329316

SWSW 9
4N -64W (6)

Sidetrack TD Formation Status
01 7498 CODL CM

			01 7498 NB-CD PR } ✓ 01 7498 NBRR CM }
05-123-34722, ALTER C 16-29DX NOBLE ENERGY INC	329316	SWSW 9 4N -64W (6)	Sidetrack TD Formation Status 01 7158 CODL CM } ✓ 01 7158 NB-CD PR } 01 7158 NBRR CM }
05-123-34723, ALTER C 09-24D NOBLE ENERGY INC	329316	SWSW 9 4N -64W (6)	Sidetrack TD Formation Status 00 7590 CODL CM } ✓ 00 7590 NB-CD PR } 00 7590 NBRR CM }
05-123-34725, ALTER C 09-33D NOBLE ENERGY INC	329316	SWSW 9 4N -64W (6)	Sidetrack TD Formation Status 00 7205 CODL CM } ✓ 00 7205 NB-CD PR } 00 7205 NBRR CM }
05-123-17978, STATE 16-414 SNYDER OIL CORP	408962	NWNW 16 4N -64W (6)	Sidetrack TD Formation Status AL ✓
05-123-12441, CPC-HARLESS 17-1 NOBLE ENERGY INC	323016	NENE 17 4N -64W (6)	Sidetrack TD Formation Status 00 7140 NB-CD PR } ✓

Water Wells Selected From Map

Filter Results by Depth Greater than ▼

[Filter]

WELL DESCRIPTION	LOCATION	WELL INFORMATION			
		Depth	Top Perf	Bottom Perf	Aquifer
Receipt=9063576, Permit=0031525-- CONRELIUS HAMPTON & KAY	NESE 8 4 N-64W	122	34	122	GW
Receipt=9065007, Permit=0063475-- PEARSON CARL F	SESE 8 4 N-64W	150	99	150	GW
Receipt=9065877, Permit=0089171-- KEMPEMA LLOYD E & MARCINE	SESE 8 4 N-64W	0	0	0	KLF
Receipt=0537407, Permit=0263561-- CONQUEST DISPOSAL SERVICE	SESE 8 4 N-64W	375	255	375	KLF
Receipt=9064487, Permit=0046097-- GRUBER DAVID K & MARCY L	NENE 17 4 N-64W	122	0	0	GW

SWD 1-8B Surface Casing 617 ft.