

Legacy Data Verification Activity

Agenda Topics

- 70-Series API Summary
 - *Headers, Directional Surveys, Log Images & Curves*
- Drillers TD and Directional Survey Depth
 - *Status of Project*
 - *Review typical problems*
- Surface Location Mismatch for 10-digit API
 - *Status of Project*
 - *Review typical problems*
- Questions

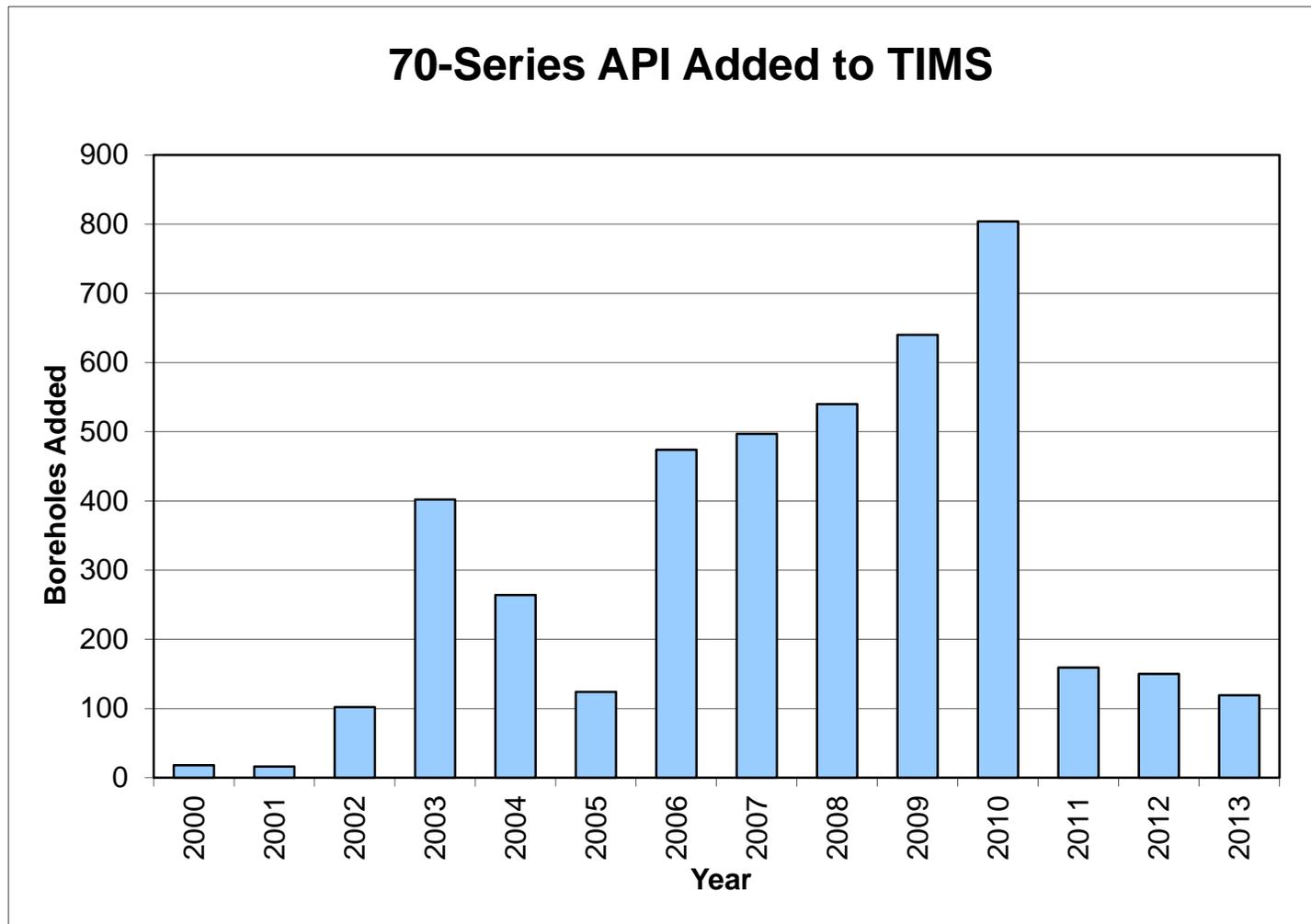
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70-Series Summary

- 4,317 70-Series Wellbores
 - *Headers with Surface and Bottom Hole Location**

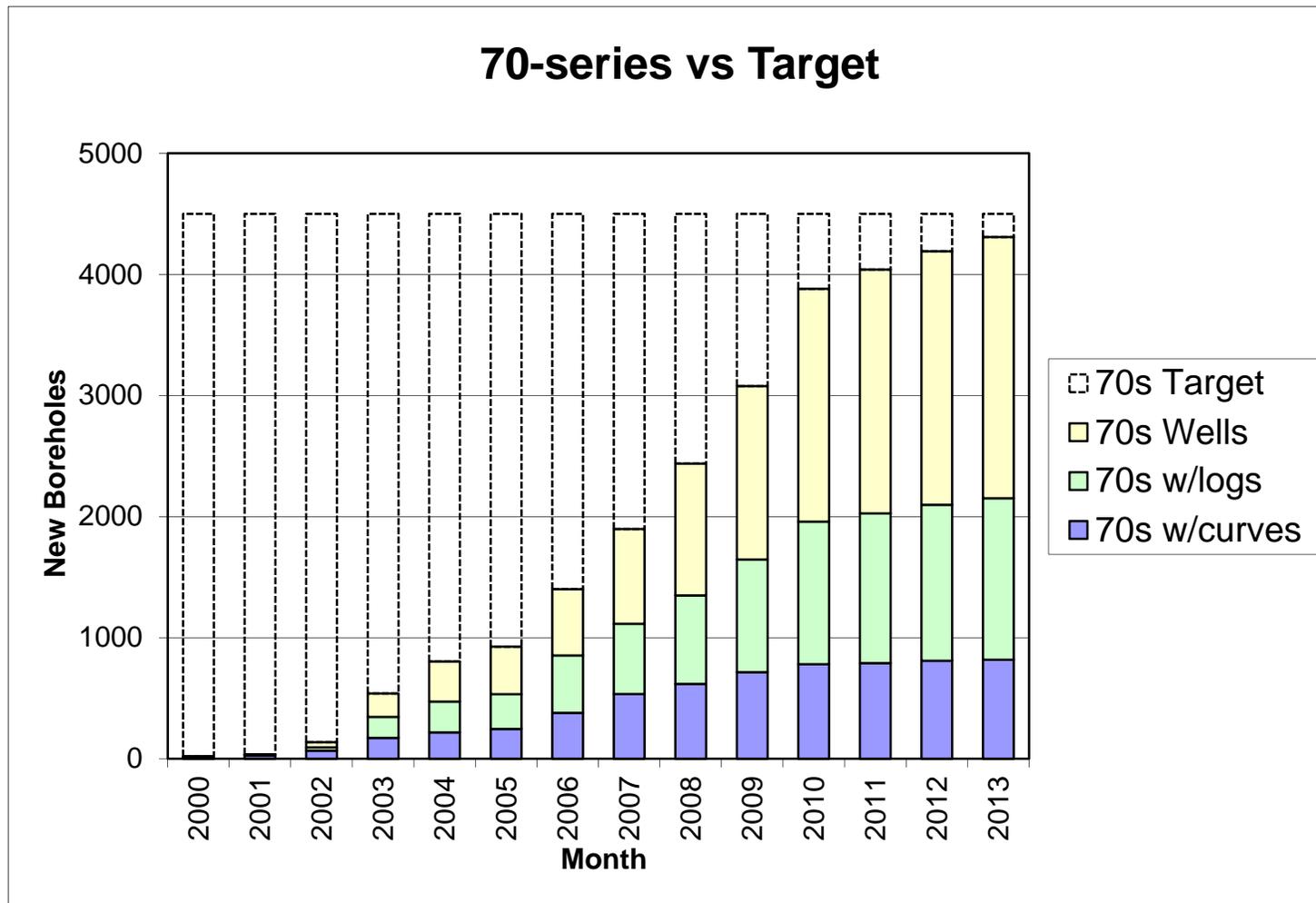
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70-Series Added by Year



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70-Series Data



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70-Series Summary

- 4,317 70-Series Wellbores
 - *Headers with Surface and Bottom Hole Location**
- 2,498 Wellbores with a Directional Survey Image
 - *This is 58% of 70-series with a directional survey image*
- 2,201 Wellbores with a Log Image
 - *51% of all 70-series with an image***
- 864 Wellbores with Digital Log Curves (LAS)
 - *20% of all 70-series with LAS data*

Drillers TD vs Directional Survey Depth

- Identified 3,429 wells where depths don't match
 - *Currently reviewing wells with a difference > 500'*
- 3,205 wells already reviewed as of 10/31
 - *Project is 93% complete*
 - *Data Problem Reports submitted for TIMS updates*
 - *Results are included with regular exports/online*
- ETC is December 2013

Drillers TD vs Directional Survey Depth

Common Problems

- S-shaped wellbores
 - *Assumed vertical from last survey point to TD*
 - *Estimated points added to directional survey**
- Missing bottom of directional survey
 - *Request missing data from operator*
 - *Use last survey point for projection to TD*
- Directional survey not run to TD
 - *Use last survey point for projection to TD*

Surface Location Mismatch for 10-digit API

- 973 wellbores with surface location mismatch
 - *Targeted those with greatest difference first*
- 798 wells already reviewed as of 10/31
 - *Project is 82% complete*
 - *Currently working wells with a difference < 50'*
 - *Data Problem Reports submitted for TIMS updates*
 - *Results are included with regular exports/online*
- ETC is January 2014

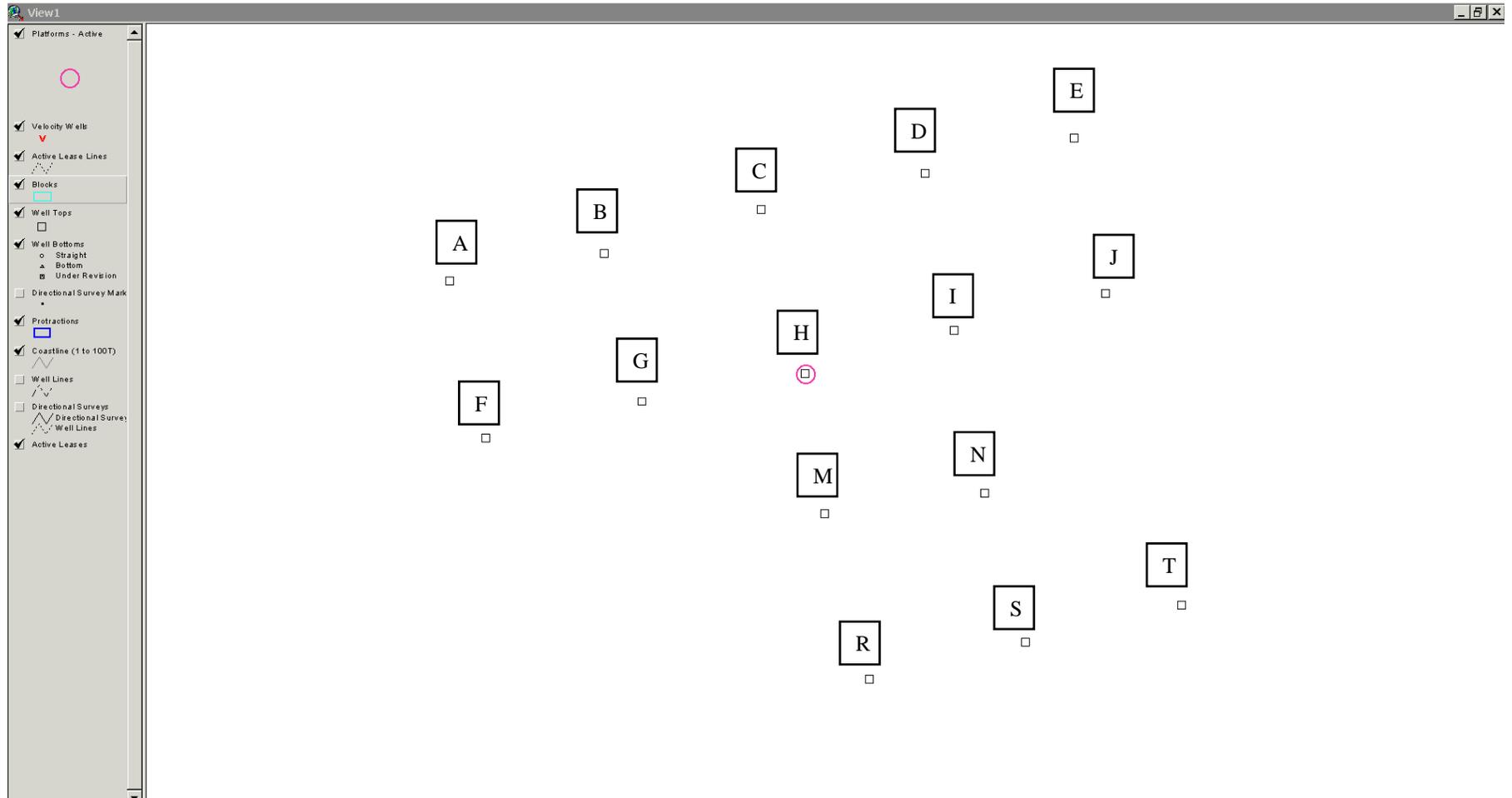
Surface Location Mismatch for 10-digit API

Common Problems

- Elapsed time between original hole & sidetrack(s)
 - *Do not assume new locations are better than old*
- Platform location vs Slot location
 - *Documentation will often switch between locations*
 - *Review all platform well locations together*
 - *Request platform template diagrams*
- Irregular block footage/departure calls
 - *Wellbores referenced to different block corners*

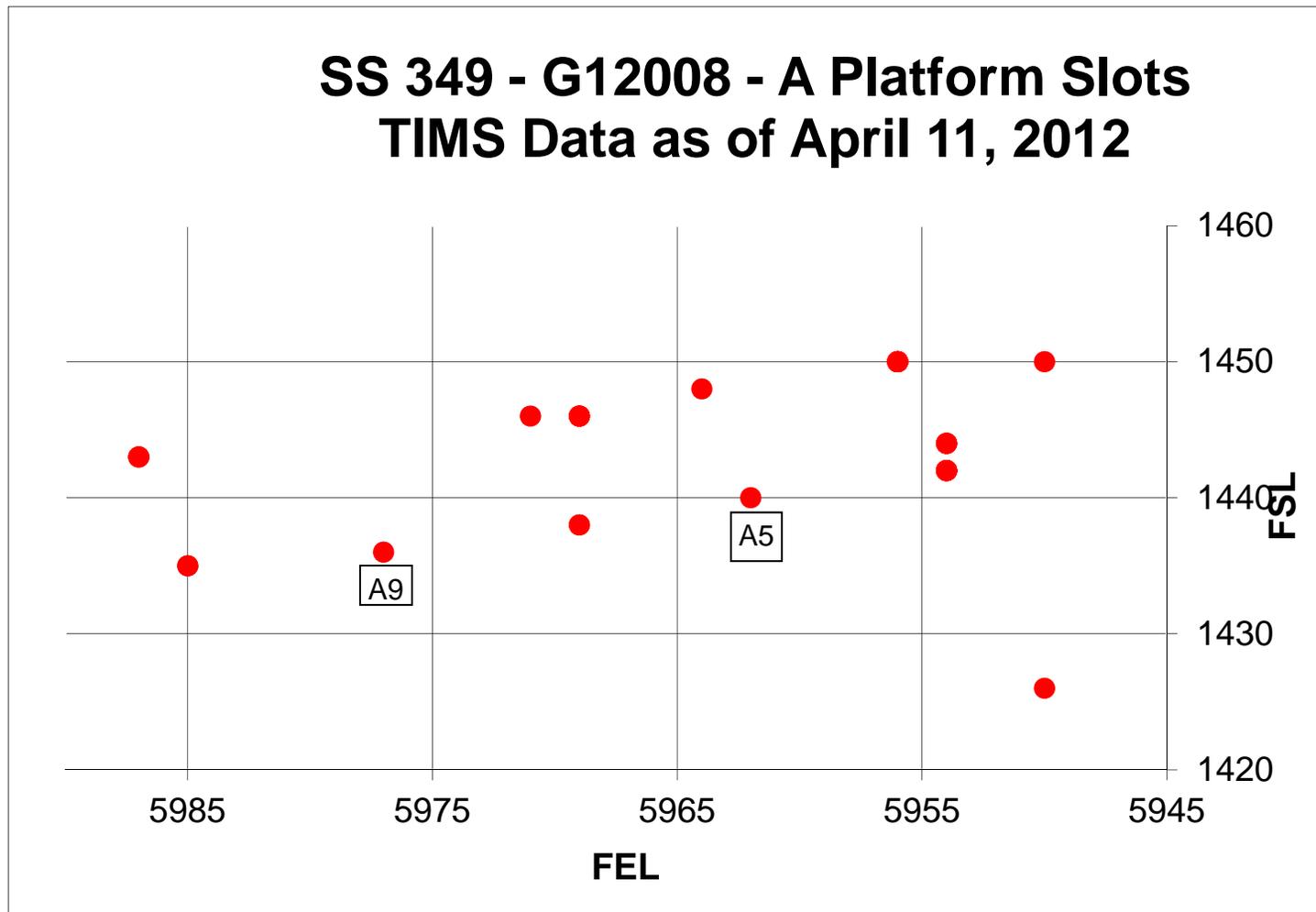
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TIMS Platform Slot Locations SS 349

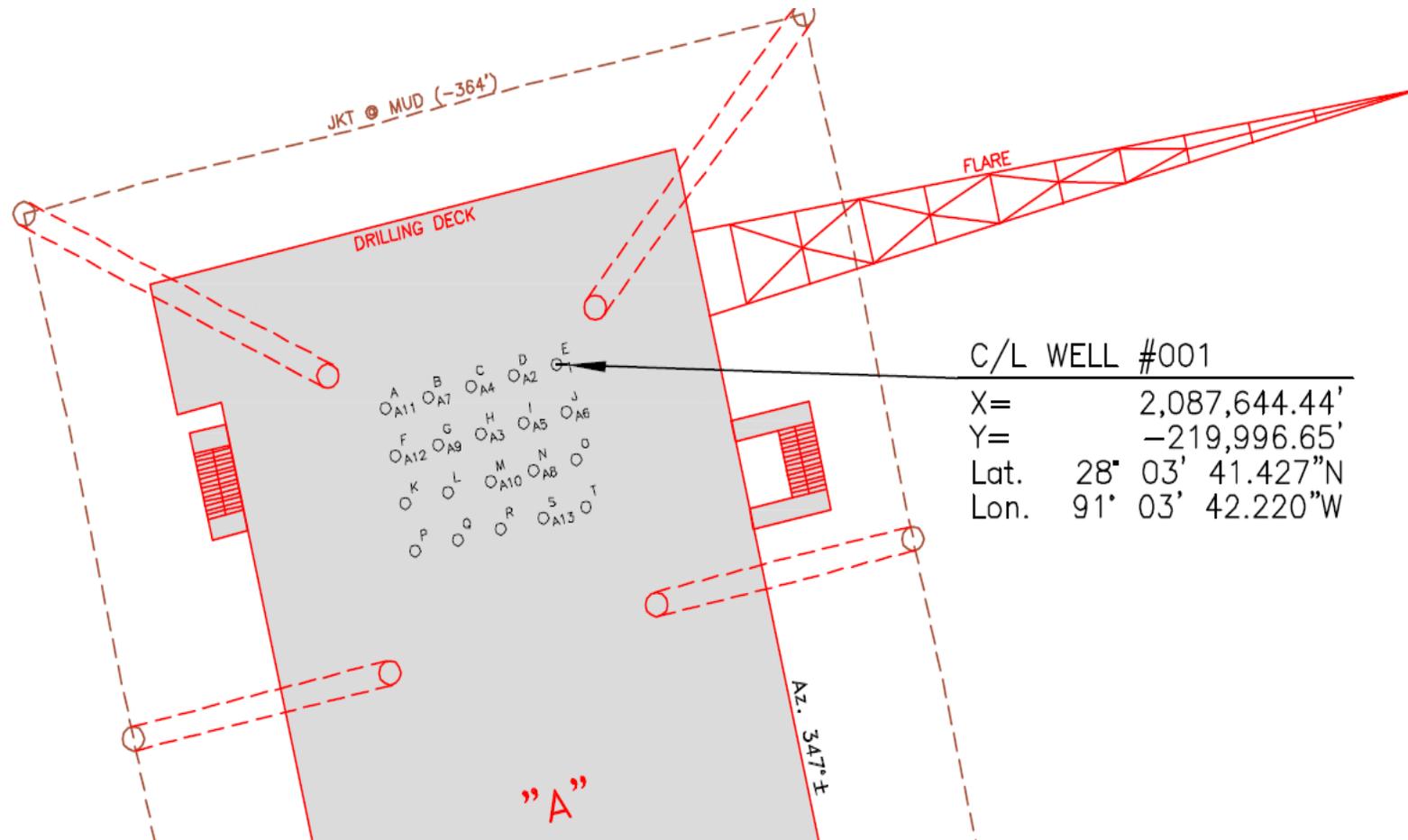


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Platform Slot Locations SS 349 - Before



Legacy Data Verification Slot Location Template Diagram



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Slot Location Template Coordinates

CONDUCTORS							
WELL	COND	CALLNS	CALLEW	X COORDINATE	Y COORDINATE	LATITUDE	LONGITUDE
A11	A	1,442.63' FSL	5,986.74' FEL	2,087,613.26'	-220,003.85'	28° 03' 41.357"N	91° 03' 42.568"W
A7	B	1,444.43' FSL	5,978.94' FEL	2,087,621.06'	-220,002.05'	28° 03' 41.374"N	91° 03' 42.481"W
A4	C	1,446.23' FSL	5,971.15' FEL	2,087,628.85'	-220,000.25'	28° 03' 41.392"N	91° 03' 42.394"W
A2	D	1,448.03' FSL	5,963.36' FEL	2,087,636.65'	-219,998.45'	28° 03' 41.409"N	91° 03' 42.307"W
A1	E	1,449.83' FSL	5,955.56' FEL	2,087,644.44'	-219,996.65'	28° 03' 41.427"N	91° 03' 42.220"W
A12	F	1,434.84' FSL	5,984.94' FEL	2,087,615.06'	-220,011.64'	28° 03' 41.279"N	91° 03' 42.548"W
A9	G	1,436.64' FSL	5,977.15' FEL	2,087,622.85'	-220,009.84'	28° 03' 41.297"N	91° 03' 42.461"W
A3	H	1,438.44' FSL	5,969.35' FEL	2,087,630.65'	-220,008.04'	28° 03' 41.315"N	91° 03' 42.374"W
A5	I	1,440.24' FSL	5,961.56' FEL	2,087,638.44'	-220,006.24'	28° 03' 41.332"N	91° 03' 42.287"W
A6	J	1,442.04' FSL	5,953.76' FEL	2,087,646.24'	-220,004.44'	28° 03' 41.350"N	91° 03' 42.200"W
	K	1,427.04' FSL	5,983.14' FEL	2,087,616.86'	-220,019.44'	28° 03' 41.202"N	91° 03' 42.528"W
	L	1,428.84' FSL	5,975.35' FEL	2,087,624.65'	-220,017.64'	28° 03' 41.220"N	91° 03' 42.441"W
A10	M	1,430.64' FSL	5,967.55' FEL	2,087,632.45'	-220,015.84'	28° 03' 41.237"N	91° 03' 42.354"W
A8	N	1,432.44' FSL	5,959.76' FEL	2,087,640.24'	-220,014.04'	28° 03' 41.255"N	91° 03' 42.267"W
	O	1,434.24' FSL	5,951.96' FEL	2,087,648.04'	-220,012.24'	28° 03' 41.273"N	91° 03' 42.180"W
	P	1,419.25' FSL	5,981.34' FEL	2,087,618.66'	-220,027.23'	28° 03' 41.125"N	91° 03' 42.508"W
	Q	1,421.05' FSL	5,973.55' FEL	2,087,626.45'	-220,025.43'	28° 03' 41.143"N	91° 03' 42.421"W
	R	1,422.85' FSL	5,965.75' FEL	2,087,634.25'	-220,023.63'	28° 03' 41.160"N	91° 03' 42.334"W
A13	S	1,424.65' FSL	5,957.96' FEL	2,087,642.04'	-220,021.83'	28° 03' 41.178"N	91° 03' 42.247"W
	T	1,426.45' FSL	5,950.16' FEL	2,087,649.84'	-220,020.03'	28° 03' 41.195"N	91° 03' 42.160"W

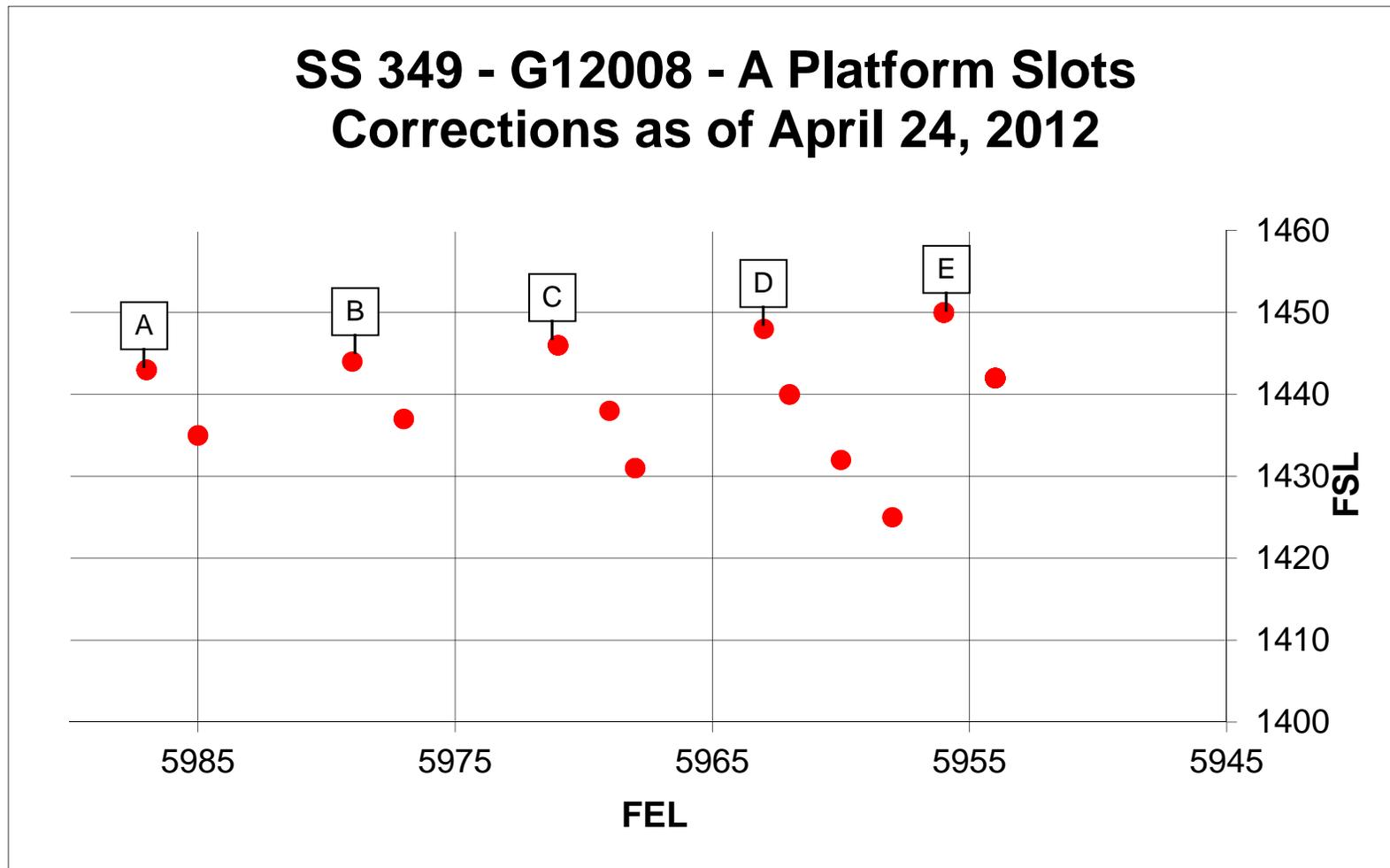
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Slot Location Template Corrections

WELL	OPERATOR		SLOT	API		TIMS		Delta	
	FSL	FEL				FSL	FEL	Y	X
A009	1437.00	5977.00	G	177124061300		1450.00	5950.00	-13.0	27.0
A009	1437.00	5977.00	G	177124061301		1450.00	5950.00	-13.0	27.0
A010	1431.00	5968.00	M	177124059200		1444.00	5954.00	-13.0	14.0
A010	1431.00	5968.00	M	177124059201		1444.00	5954.00	-13.0	14.0
A008	1432.00	5960.00	N	177124059000		1444.00	5954.00	-12.0	6.0
A003	1438.00	5969.00	H	177124052300		1446.00	5971.00	-8.0	-2.0
A013	1425.00	5958.00	S	177124067900		1426.00	5950.00	-1.0	8.0
A005	1440.00	5962.00	I	177124052670		1438.00	5969.00	2.0	-7.0
A005	1440.00	5962.00	I	177124052671		1438.00	5969.00	2.0	-7.0
A005	1440.00	5962.00	I	177124052600		1438.00	5969.00	2.0	-7.0
A007	1444.00	5979.00	B	177124058100		1444.00	5954.00	0.0	25.0
A004	1446.00	5971.00	C	177124055970		1446.00	5969.00	0.0	2.0
A004	1446.00	5971.00	C	177124055900		1446.00	5969.00	0.0	2.0
A004	1446.00	5971.00	C	177124055901		1446.00	5969.00	0.0	2.0
A004	1446.00	5971.00	C	177124055902		1446.00	5969.00	0.0	2.0

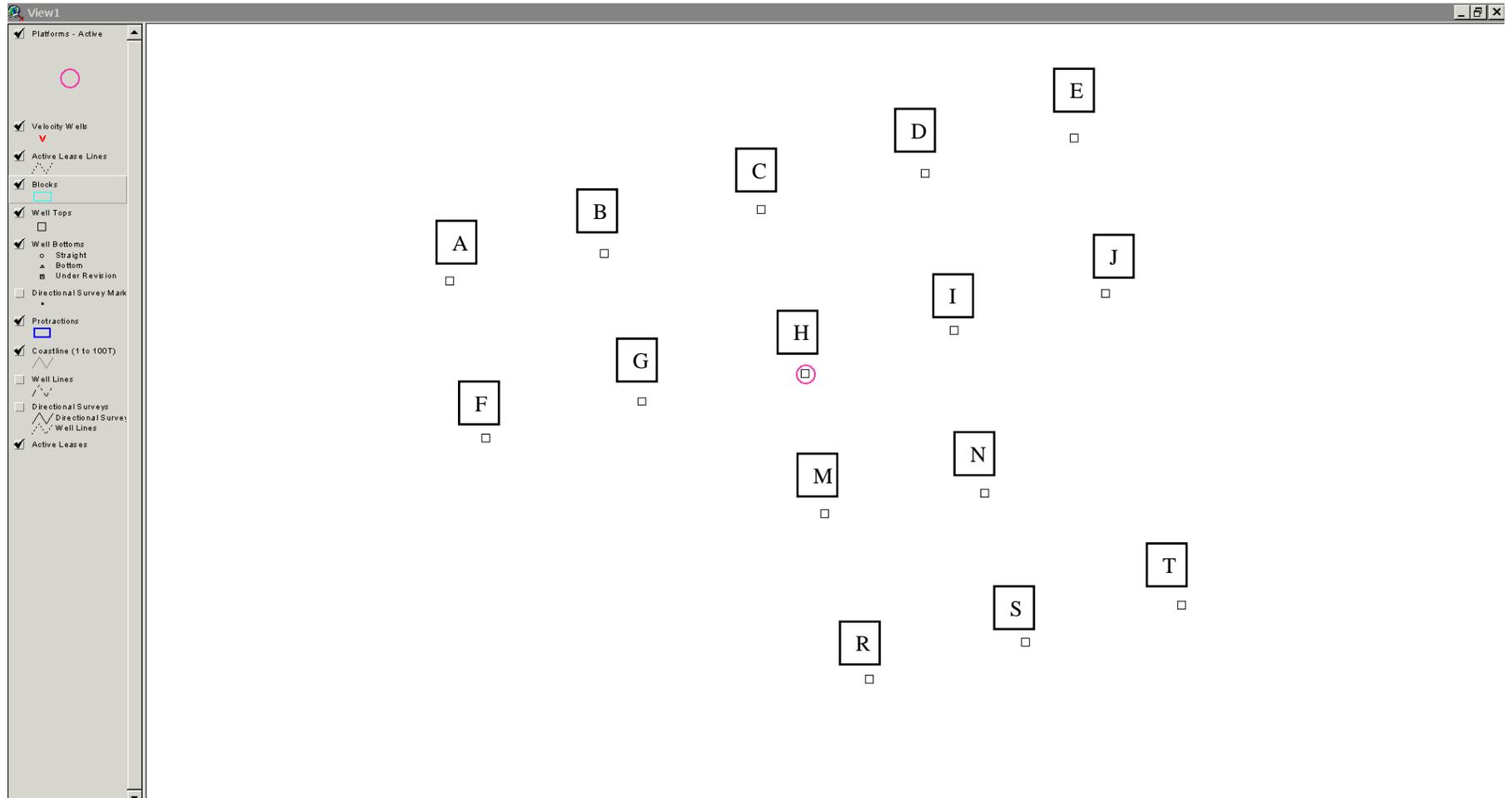
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Platform Slot Locations SS 349 - After



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TIMS Platform Slot Locations SS 349



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Platform Slot Location Recommendations

- New Plans & APDs
 - *Include slot template diagrams with coordinates*
- Historical Template Diagrams
 - *Submit copies when you find them (pdf)*
 - *Send to tdms@bsee.gov*
- Collaborative Approach
 - *There is nothing proprietary about surface locations*
 - *One template diagram confirms/corrects multiple wells*

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Questions?