

## Update on two upstream developers

### AUD weakness positive for Inpex, for JAPEX we focus on accounting treatment

- **Conclusion** — We fine-tune our earnings forecast and target prices based on Q1 results, although our basic outlook is unchanged. We reiterate our Buy rating on Inpex, with a ¥620,000 target price, and maintain our Neutral rating on Japex, with a ¥4,800 target price.
- **Inpex** — In the short term, we believe the following could weigh on the shares: 1) little expectation of profit growth in FY3/14 on the impact of a weakening yen, including impairment losses on dollar-denominated debt; 2) an increase in US LNG export approvals; and 3) a loosening LNG spot market supply/demand balance due to the restart of nuclear plants. But on a positive note, we do not believe the value of Ichthys (Australia) has diminished considering 1) the sale of a stake to CPC has been decided, 2) the construction progress rate has increased to 24ppt from 18ppt at end-March; and 3) the AUD has weakened compared with \$1.03/AUD when the FID was made, having a positive impact on NPV.
- **JAPEX** — JAPEX entered into an agreement to participate in a shale gas development/LNG production project in western Canada in March (10% stake, project operator: Petronas) and formally completed procedures for its participation in April. The amortization method and other details will be decided moving forward. Considering 1) JAPEX could pay Petronas a premium to the latent project value and 2) currently estimated reserves and production volume are only small, amortization expenses, including goodwill, could be quite large. Given the size of the investment, depending on the amortization methodology, we see potential for profit plans to be revised down sharply.

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Company	Ticker	Rating		Target Price		Current Year Earnings Estimates	
		Old	New	Old	New	Old	New
Inpex	1605	1	1	¥610,000	¥620,000	¥38,347	¥39,168
JAPEX	1662	2	2	¥4,900	¥4,800	¥437	¥432

See Appendix A-1 for Analyst Certification, Important Disclosures and non-US research analyst disclosures.

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## Company Focus

- Estimate Change
- Target Price Change

<b>Buy</b>	<b>1</b>
Price (16 Aug 13)	¥434,500
Target price	¥620,000
from ¥610,000	
Expected share price return	42.7%
Expected dividend yield	1.7%
<b>Expected total return</b>	<b>44.3%</b>
Market Cap	¥1,586,313M
	US\$16,265M

### Price Performance

(RIC: 1605.T, BB: 1605 JP)



## Inpex (1605)

### Reiterating Buy: AUD and yen weakness supporting long-term value

- **Conclusion** — We raise our target price to ¥620,000 from ¥610,000 to reflect small revisions to our earnings forecast and reiterate our Buy rating. Assuming the Ichthys construction progress rate has increased to 24ppt from 18ppt at end-March, as announced by Inpex with Q1 results, and maintaining forex assumptions of ¥100/\$ and \$.90/AUD, we estimate the yen-based NPV of Ichthys is higher now than it was when the FID was made in January 2012. We continue to view the shares as significantly undervalued.
- **Short-term focal points** — In the short term, we continue to believe the following factors could weigh on the share price: 1) little expectation of profit growth in FY3/14 because of the impact of a weakening yen, including impairment losses on dollar-denominated debt; 2) an increase in US LNG export approvals; and 3) a loosening LNG spot market supply/demand balance caused by the restart of nuclear plants
- **NP forecasts** — We raise our FY3/14 forecast to ¥143bn (–22% YoY) from ¥140bn and our FY3/15 forecast to ¥142bn (–0.7%) from ¥131bn. The FY3/14 revision mainly reflects progress on Ichthys in Q1 and the FY3/15 revision the profit on the sale of a stake in Ichthys to CPC (2.625% for around ¥13bn (our estimate)). We revise our FY3/14 forex assumption to ¥99.5/\$ from ¥95/\$.
- **Ichthys** — In the last three months 1) the sale of a stake in to CPC has been decided; 2) the construction progress rate has increased to 24ppt from 18ppt at end-March; and 3) the Australian dollar has weakened compared with \$1.03/AUD when the FID was made, having a positive impact on NPV. Considering these developments, we do not believe the value of Ichthys has diminished.

Consol.	Sales		OP			RP		NP		EPS		PE
	¥M	YOY (%)	¥M	YOY (%)	OPM(%)	¥M	YOY (%)	¥M	YOY (%)	¥	X	
3/12A	1,186,731	25.8	709,358	33.9	59.8	767,040	50.8	194,003	50.7	53,138	8.2	
3/13A	1,216,533	2.5	693,449	-2.2	57.0	718,147	-6.4	182,963	-5.7	50,115	8.7	
3/14CE	1,209,000	-0.6	594,000	-14.3	49.1	615,000	-14.4	137,000	-25.1	37,524	11.6	
3/14CRE	1,222,000	0.4	615,000	-11.3	50.3	637,000	-11.3	142,000	-22.4	38,896	11.2	
3/14E	1,243,000	2.2	719,000	3.7	57.8	661,000	-8.0	140,000	-23.5	38,347	11.3	
3/14RE	1,311,000	7.8	734,000	5.8	56.0	682,000	-5.0	143,000	-21.8	39,168	11.1	
3/15E	1,237,000	-0.5	690,000	-4.0	55.8	642,000	-2.9	131,000	-6.4	35,882	12.1	
3/15RE	1,262,000	-3.7	696,000	-5.2	55.2	671,000	-1.6	142,000	-0.7	38,895	11.2	
3/16E	1,215,000	-1.8	663,000	-3.9	54.6	623,000	-3.0	118,000	-9.9	32,321	13.4	
3/16RE	1,227,000	-2.8	661,000	-5.0	53.9	626,000	-6.7	110,000	-22.5	30,130	14.4	

A: Actuals, E: Citi Research Ests, CE: Co. Ests, RE: Citi Research Revised Ests, CRE: Co. Revised Ests, NA: Not Available, NM: Not Meaningful

1605.T: Fiscal year end 31-Mar						Price: ¥434,500; TP: ¥620,000; Market Cap: ¥1,586,313m; Recomm: Buy					
Profit & Loss (¥m)	2012	2013	2014E	2015E	2016E	Valuation ratios	2012	2013	2014E	2015E	2016E
Sales revenue	1,186,731	1,216,533	1,311,000	1,262,000	1,227,000	PE (x)	8.2	8.7	11.1	11.2	14.4
Cost of sales	-395,442	-426,326	-475,000	-469,000	-469,000	PB (x)	0.7	0.6	0.6	0.6	0.6
Gross profit	791,289	790,207	836,000	793,000	758,000	EV/EBITDA (x)	-0.1	-0.1	0.3	1.0	1.5
Gross Margin (%)	66.7	65.0	63.8	62.8	61.8	FCF yield (%)	4.8	-21.6	-45.8	-28.9	-20.3
EBITDA (Adj)	817,687	806,210	864,000	853,000	828,000	Dividend yield (%)	1.6	1.6	1.7	1.7	1.7
EBITDA Margin (Adj) (%)	68.9	66.3	65.9	67.6	67.5	Payout ratio (%)	13	14	18	19	24
Depreciation	-108,329	-112,761	-130,000	-157,000	-167,000	ROE (%)	9.3	7.9	5.6	5.3	4.0
Amortisation	0	0	0	0	0	Cashflow (¥m)	2012	2013	2014E	2015E	2016E
EBIT (Adj)	709,358	693,449	734,000	696,000	661,000	EBITDA	817,687	806,210	864,000	853,000	828,000
EBIT Margin (Adj) (%)	59.8	57.0	56.0	55.2	53.9	Working capital	-17,061	10,593	-21,000	5,000	3,000
Net interest	10,165	15,048	7,000	6,000	0	Other	-477,882	-559,730	-583,000	-549,000	-547,000
Non-op/Except	47,517	9,650	-59,000	-31,000	-35,000	Operating cashflow	322,744	257,073	260,000	309,000	284,000
Recurring profit	767,040	718,147	682,000	671,000	626,000	Capex	-247,100	-599,200	-987,000	-768,000	-606,000
Tax	-536,933	-529,275	-531,000	-524,000	-512,000	Net acq/disposals	0	0	0	0	0
Extraord./Min.Int./Pref.div.	-36,104	-5,909	-8,000	-5,000	-4,000	Other	-33,764	109,330	312,000	158,000	42,000
Reported net profit	194,003	182,963	143,000	142,000	110,000	Investing cashflow	-280,864	-489,870	-675,000	-610,000	-564,000
Net Margin (%)	16.3	15.0	10.9	11.3	9.0	Dividends paid	-21,922	-27,385	-26,000	-26,000	-26,000
Core NPAT	194,003	182,963	143,000	142,000	110,000	Financing cashflow	29,294	137,069	0	86,000	256,000
Per share data	2012	2013	2014E	2015E	2016E	Net change in cash	68,511	-44,230	-415,000	-215,000	-24,000
Reported EPS (¥)	53,138	50,115	39,168	38,895	30,130	Free cashflow to s/holders	75,644	-342,127	-727,000	-459,000	-322,000
Core EPS (¥)	53,138	50,115	39,168	38,895	30,130						
EPS* (¥)	53,138	50,115	39,168	38,895	30,130						
DPS (¥)	7,000	7,000	7,200	7,200	7,200						
CFPS (¥)	88,401	70,414	71,215	84,637	77,789						
FCFPS (¥)	20,719	-93,710	-199,129	-125,723	-88,198						
BVPS (¥)	596,909	679,640	711,607	743,380	766,388						
Wtd avg ord shares (m)	3.7	3.7	3.7	3.7	3.7						
Wtd avg diluted shares (m)	3.7	3.7	3.7	3.7	3.7						
Growth rates	2012	2013	2014E	2015E	2016E						
Sales revenue (%)	25.8	2.5	7.8	-3.7	-2.8						
EBIT (Adj) (%)	33.9	-2.2	5.8	-5.2	-5.0						
Core NPAT (%)	50.7	-5.7	-21.8	-0.7	-22.5						
Core EPS (%)	50.7	-5.7	-21.8	-0.7	-22.5						
Balance Sheet (¥m)	2012	2013	2014E	2015E	2016E						
Cash & cash equiv.	675,285	765,456	369,000	171,000	164,000						
Accounts receivables	119,459	117,411	114,000	110,000	107,000						
Inventory	11,977	15,409	22,000	21,000	21,000						
Net fixed & other tangibles	617,016	964,697	1,750,000	2,318,000	2,714,000						
Goodwill & intangibles	0	0	0	0	0						
Financial & other assets	1,642,660	1,753,185	1,495,000	1,363,000	1,347,000						
Total assets	3,066,397	3,616,158	3,750,000	3,983,000	4,353,000						
Accounts payable	30,228	41,401	24,000	24,000	24,000						
Short-term debt	4,801	8,560	34,000	54,000	71,000						
Long-term debt	313,972	466,908	467,000	559,000	824,000						
Provisions & other liab	403,203	428,305	429,000	429,000	429,000						
Total liabilities	752,204	945,174	954,000	1,066,000	1,348,000						
Shareholders' equity	2,179,251	2,481,292	2,598,000	2,714,000	2,798,000						
Minority interests	134,941	189,691	198,000	203,000	207,000						
Total equity	2,314,192	2,670,983	2,796,000	2,917,000	3,005,000						
Net debt	-356,512	-289,988	132,000	442,000	731,000						
Net debt to equity (%)	-15.4	-10.9	4.7	15.2	24.3						

Note: Consolidated data. \* EPS: NP/Est Shares OS.

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## Company Focus

- Estimate Change
- Target Price Change

<b>Neutral</b>	<b>2</b>
Price (16 Aug 13)	¥4,290
Target price	¥4,800
from ¥4,900	
Expected share price return	11.9%
Expected dividend yield	1.2%
<b>Expected total return</b>	<b>13.1%</b>
Market Cap	¥245,185M
	US\$2,514M

### Price Performance (RIC: 1662.T, BB: 1662 JP)



## Japan Petroleum Exploration (1662)

### Still Neutral: Focus on accounting method for western Canada LNG project

- **Conclusion** — We trim our JAPEX target price to ¥4,800 from ¥4,900 to reflect small revisions to our earnings forecasts and maintain our Neutral rating. There is no change to our fundamental outlook. However, we caution there is risk of downward revisions to NP forecasts depending on the accounting method adopted for a shale gas development/LNG production project in western Canada.
- **Valuation** — Our ¥4,800 target price is the sum of 1) core business value (around ¥1,300), 2) the value of shares held in Inpex (¥2,980), and 3) the value of shares held in Japan Drilling Company (around ¥650). Our core business value estimate is based on a FY3/14E PER of c3x (the historical average), the value of the Inpex holding is based on our ¥620,000 target price for Inpex and the value of the JDC holding is based on JDC's current share price.
- **RP forecasts** — We lower our FY3/14 forecast to ¥33bn (+18% YoY) from ¥34bn. The revision mainly reflects forex and oil price trends through April-June (the yen was slightly stronger than our ¥100/\$ forecast) and lower-than-expected Canada oil sands production volume. There are no changes to our forecasts for FY3/15 and FY3/16.
- **Points to watch** — JAPEX entered into a Heads of Agreement to participate in a shale gas development/LNG production project in western Canada in March (10% stake, project operator: Petronas) and formally completed procedures for its participation in April. The amortization methodology and other details will be decided moving forward. Considering 1) JAPEX could pay Petronas a premium to the latent project value; and 2) currently estimated reserves and production volume are only small, amortization expenses, including goodwill, could be quite large. Given the size of the investment, depending on the amortization method, we see potential for profit plans to be revised down sharply.

Consol.	Sales		OP			RP		NP		EPS		PE
	¥M	YOY (%)	¥M	YOY (%)	OPM(%)	¥M	YOY (%)	¥M	YOY (%)	¥		X
3/12A	230,638	15.5	15,048	8.6	6.5	22,162	29.4	17,031	70.1	298		14.4
3/13A	231,086	0.2	13,908	-7.6	6.0	28,085	26.7	-862	nm	-15		nm
3/14CE	232,692	0.7	20,722	49.0	8.9	28,783	2.5	21,511	nm	376		11.4
3/14E	229,000	-0.9	26,000	86.9	11.4	34,000	21.1	25,000	nm	437		9.8
3/14RE	228,000	-1.3	25,000	79.8	11.0	33,000	17.5	24,700	nm	432		9.9
3/15E	228,000	-0.4	28,000	7.7	12.3	36,000	5.9	26,500	6.0	464		9.3
3/15RE	227,000	-0.4	28,000	12.0	12.3	36,000	9.1	27,000	9.3	472		9.1
3/16E	226,000	-0.9	27,000	-3.6	11.9	36,000	0.0	25,500	-3.8	446		9.6
3/16RE	225,000	-0.9	27,000	-3.6	12.0	36,000	0.0	26,000	-3.7	455		9.4

A: Actuals, E: Citi Research Ests, CE: Co. Ests, RE: Citi Research Revised Ests, CRE: Co. Revised Ests, NA: Not Available, NM: Not Meaningful

1662.T: Fiscal year end 31-Mar						Price: ¥4,290; TP: ¥4,800; Market Cap: ¥245,185m; Recomm: Neutral					
Profit & Loss (¥m)	2012	2013	2014E	2015E	2016E	Valuation ratios	2012	2013	2014E	2015E	2016E
Sales revenue	230,638	231,086	228,000	227,000	225,000	PE (x)	14.4	nm	9.9	9.1	9.4
Cost of sales	-174,359	-172,075	-161,800	-158,000	-157,000	PB (x)	0.6	0.6	0.6	0.6	0.5
Gross profit	56,279	59,011	66,200	69,000	68,000	EV/EBITDA (x)	-0.6	-1.3	-0.7	-0.1	0.0
Gross Margin (%)	24.4	25.5	29.0	30.4	30.2	FCF yield (%)	5.5	3.6	-14.5	-4.7	3.3
EBITDA (Adj)	38,950	30,202	45,500	51,500	51,000	Dividend yield (%)	0.9	0.9	1.2	1.2	1.2
EBITDA Margin (Adj) (%)	16.9	13.1	20.0	22.7	22.7	Payout ratio (%)	13	-265	12	11	11
Depreciation	-23,902	-16,294	-20,500	-23,500	-24,000	ROE (%)	4.4	-0.2	6.3	6.5	5.9
Amortisation	0	0	0	0	0	Cashflow (¥m)	2012	2013	2014E	2015E	2016E
EBIT (Adj)	15,048	13,908	25,000	28,000	27,000	EBITDA	38,950	30,202	45,500	51,500	51,000
EBIT Margin (Adj) (%)	6.5	6.0	11.0	12.3	12.0	Working capital	-1,568	6,842	-7,000	1,000	1,000
Net interest	6,656	11,438	4,400	4,200	4,300	Other	-208	-2,788	1,000	0	0
Non-op/Except	458	2,739	3,600	3,800	4,700	Operating cashflow	37,174	34,256	39,500	52,500	52,000
Recurring profit	22,162	28,085	33,000	36,000	36,000	Capex	-23,806	-25,355	-75,000	-64,000	-44,000
Tax	-4,746	6,927	-7,300	-8,000	-9,000	Net acq/disposals	0	0	0	0	0
Extraord./Min.Int./Pref.div.	-385	-35,874	-1,000	-1,000	-1,000	Other	9,856	10,519	0	0	0
Reported net profit	17,031	-862	24,700	27,000	26,000	Investing cashflow	-13,950	-14,836	-75,000	-64,000	-44,000
Net Margin (%)	7.4	-0.4	10.8	11.9	11.6	Dividends paid	-2,286	-2,286	-2,000	-3,000	-3,000
Core NPAT	17,031	-862	24,700	27,000	26,000	Financing cashflow	9,856	-7,177	-2,000	12,000	-8,000
Per share data	2012	2013	2014E	2015E	2016E	Net change in cash	32,979	12,839	-37,500	500	0
Reported EPS (¥)	298	-15	432	472	455	Free cashflow to s/holders	13,368	8,901	-35,500	-11,500	8,000
Core EPS (¥)	298	-15	432	472	455						
EPS* (¥)	298	-15	432	472	455						
DPS (¥)	40	40	50	50	50						
CFPS (¥)	650	599	691	919	910						
FCFPS (¥)	234	156	-621	-201	140						
BVPS (¥)	6,869	6,692	7,086	7,506	7,909						
Wtd avg ord shares (m)	57.2	57.2	57.2	57.2	57.2						
Wtd avg diluted shares (m)	57.2	57.2	57.2	57.2	57.2						
Growth rates	2012	2013	2014E	2015E	2016E						
Sales revenue (%)	15.5	0.2	-1.3	-0.4	-0.9						
EBIT (Adj) (%)	8.6	-7.6	79.8	12.0	-3.6						
Core NPAT (%)	70.1	nm	nm	9.3	-3.7						
Core EPS (%)	70.1	nm	nm	9.3	-3.7						
Balance Sheet (¥m)	2012	2013	2014E	2015E	2016E						
Cash & cash equiv.	81,675	107,284	70,000	70,000	70,000						
Accounts receivables	27,392	32,337	29,000	28,000	28,000						
Inventory	9,458	11,574	11,000	11,000	10,000						
Net fixed & other tangibles	140,016	101,077	156,000	197,000	217,000						
Goodwill & intangibles	0	0	0	0	0						
Financial & other assets	274,349	272,899	272,000	272,000	272,000						
Total assets	532,890	525,171	538,000	578,000	597,000						
Accounts payable	7,251	18,947	8,000	8,000	8,000						
Short-term debt	0	0	0	0	0						
Long-term debt	26,198	24,197	24,000	39,000	34,000						
Provisions & other liab	92,668	78,942	79,000	79,000	79,000						
Total liabilities	126,117	122,086	111,000	126,000	121,000						
Shareholders' equity	392,596	382,441	405,000	429,000	452,000						
Minority interests	14,176	21,183	22,000	23,000	24,000						
Total equity	406,772	403,624	427,000	452,000	476,000						
Net debt	-55,477	-83,087	-46,000	-31,000	-36,000						
Net debt to equity (%)	-13.6	-20.6	-10.8	-6.9	-7.6						

Note: Consolidated data. \* EPS: NP/Est Shares OS.

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## Inpex

### Investment strategy

We rate the shares of Inpex Holdings Buy (1), with a ¥620,000 target price.

We believe the current share price does not factor in the value of projects from which an earnings contribution can be expected over the medium term, such as the Kashagan oil field and the Ichthys project. Progress is being made with the development of Kashagan ahead of a 2013 production start, and with Ichthys, which we consider the most important project, the FID was finalized in January and prospects are in sight for the sale of all LNG production. Sales of stakes, including one to Total, are going smoothly.

We do not hold out much hope of a big increase in production volume before the later part of the current decade, when we expect Ichthys production to ramp up, in part because of waning production at existing projects. However, with PBR and reserve-based valuations low, we believe undervaluation looks clearer as proven reserves have jumped now that the Ichthys FID has been made. We therefore rate the shares Buy.

### Valuation

We derive our target price of ¥620,000 from a DCF model and earnings forecasts for each project over the 15 years through FY3/28. We use DCF as our main valuation approach as it is difficult to gauge EV on near-term earnings power alone, because in the upstream oil and gas operations, companies make large investments with an eye to long-term returns. For Ichthys (Australia) in particular, we expect investment returns to come in FY3/18 and out, but as we expect Inpex to invest ¥4trn over the coming seven years in Ichthys and other projects, we cannot determine the value of the company on single-year metrics such as EPS and EV/DACF.

We factor in the cash flow of projects we expect to contribute to future earnings into our DCF model as follows: 80% for Kashagan, where production is slated to start in 2013, 75% for Ichthys, and 0% for Abadi. If we were to factor in all of the cash flow we anticipate for the three projects, we would derive a theoretical share price of ¥820,000.

In our DCF model, based on 15 years of earnings forecasts, we assume a terminal growth rate of 0% and set WACC at 10%. Our long-term earnings forecast assumptions are for crude at \$90/bbl and the dollar/yen rate at ¥95/\$. We think a forecast range of 15 years is appropriate, as for the coming seven years we only anticipate cash outflows on the Ichthys investment, while at around year 10 we anticipate only abundant cash inflows, on the tax benefits around the start of Ichthys production. We derive a WACC of 6.65% from a risk-free rate of 3%, and equity-risk premium of 5%, and the three-year weekly adjusted beta of 0.93 from Bloomberg. We conservatively set our WACC at 10%, in part because resource prices are highly volatile.

EV/DACF (EV/EBIDAX [earnings before interest, depreciation, amortization, and exploration expenses]) is commonly used to value overseas upstream oil companies, as it strips out differences in resource-related regulatory systems in various countries as well as different stages of progress at various oil development

projects (in terms of levels of exploration expenses, etc.). Our target price equates to EV/DACF of 5.3x based on our FY3/14 forecasts, which looks reasonable given the global average range of 4x-9x. Also, the multiple based on our forecasts for FY3/19, when full production is anticipated at the Ichthys project, is 1.5x, and therefore we think our target price is achievable.

## Risks

Risks that could cause the share price to remain short of our target price include 1) an unanticipated exhaustion of the company's major oil and gas fields, 2) country risk (political turmoil and heavy increases in tax burdens in oil producing countries), and 3) a plunge in the price of crude oil. Conversely, the shares could exceed our target price on 1) a substantial increase in the crude oil price and 2) the discovery of substantial additional large oil and gas reserves and large upward revisions to proven reserves.

## Japan Petroleum Exploration

### Investment strategy

We rate the shares of Japan Petroleum Exploration Neutral (2), with a ¥4,800 target price. We think the profitability of mainstay domestic natural gas sales has improved due to rate revisions and other factors. The share price is heavily influenced by the value of the company's Inpex holdings, and we expect Inpex's share price to rise with progress at the Ichthys project in Australia. Also, we think royalties paid and depreciation related to the Canada oil sands business are likely to decline from FY3/14, which should boost profits. However, the shares do not look particularly undervalued. Therefore, we rate the shares Neutral.

### Valuation

We think JAPEX EV is the sum of 1) the value of the core business, which is mainly the domestic natural gas unit, and 2) the value of JAPEX's shareholdings. We use PER to value the core business, as we think an approach based on NP is appropriate, as it takes into account non-operating income from dividends received, etc., which is important as JAPEX has rights in the Sakhalin I project, etc.

In calculating our ¥4,800 target price, we derive a per-share value for the Inpex holding:  $\text{¥620,000 (our Inpex target price)} \times 3.65\text{mn shares (the number of Inpex shares outstanding)} \times 7.3\% \div 57.2\text{mn shares (JAPEX shares outstanding)} = \text{¥2,890}$ . For JAPEX's core business value, we factor in the gradual downtrend in domestic gas production volume, and apply a PER of around 3x, in line with the historical average, to derive a value of around ¥1,300. We combine these two values and then add in the per-share value of JAPEX's JDC holdings, based conservatively on the average share price since April 2013, to derive our target price.

EV/DACF is generally used for valuing overseas upstream oil companies, (EBIDAX [earnings before interest, depreciation, amortization, and exploration]) as it has the advantage of eliminating the impact of differences from country to country in resource-related systems as well as in development stages at upstream oil companies (exploration costs, for example). At our target price, EV/DACF is nearly 4.4x on our FY3/14 estimates, within the global average range of 4x-6x, and we think this is broadly appropriate.

## Risks

Downside risks include: 1) the price of oil could drop significantly more than we anticipate, damaging JAPEX's earnings and substantially lowering the value of its natural gas resources; 2) domestic energy prices could fall sharply as a result of competition with city gas and electric power providers, creating an environment that could have a major negative impact on the company's selling prices; and 3) a decline in the Inpex share price. On the other hand, upside risks include: 1) crude prices could rise more than we forecast, resulting in substantial increases in the value of JAPEX's natural resources and its earnings; 2) a rise in the value of the oil sand concessions and wider awareness of them resulting from an increase in actual instances of trading in them; 3) a further increase in the price of imported fossil fuel, resulting in forecasts of a further substantial increase in profitability for JAPEX's domestic natural gas holdings; and 4) a rise in the Inpex share price. Each \$1/barrel change in the price of crude has an ¥390mn impact on RP, while every ¥1 movement against the dollar has an impact of ¥360mn.



# Appendix A-1

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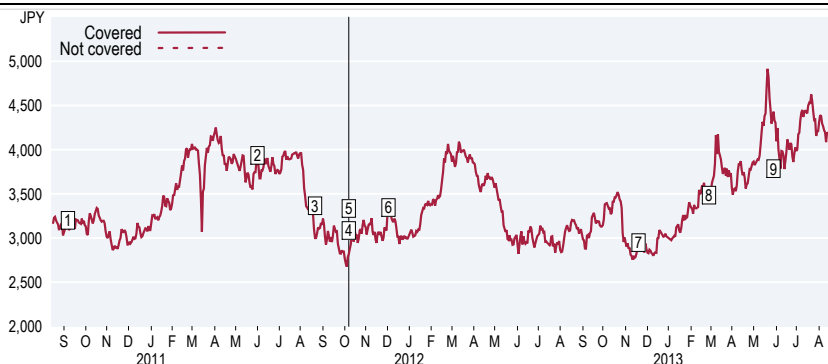
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### Japan Petroleum Exploration (1662)

#### Ratings and Target Price History

#### Fundamental Research

Analyst: Takashi Miyazaki



	Date	Rating	Target Price	Closing Price
1	7-Sep-10	2H	*3,600	3,140
2	1-Jun-11	*1H	*4,800	3,935
3	21-Aug-11	1H	*4,600	3,095

\* Indicates change

	Date	Rating	Target Price	Closing Price
4	7-Oct-11	Stock rating system changed		
5	7-Oct-11	*1	4,600	2,818
6	2-Dec-11	1	*4,300	3,290

	Date	Rating	Target Price	Closing Price
7	20-Nov-12	1	*3,900	2,948
8	27-Feb-13	*2	*4,000	3,490
9	29-May-13	2	*4,900	4,430

Rating/target price changes above reflect Eastern Standard Time

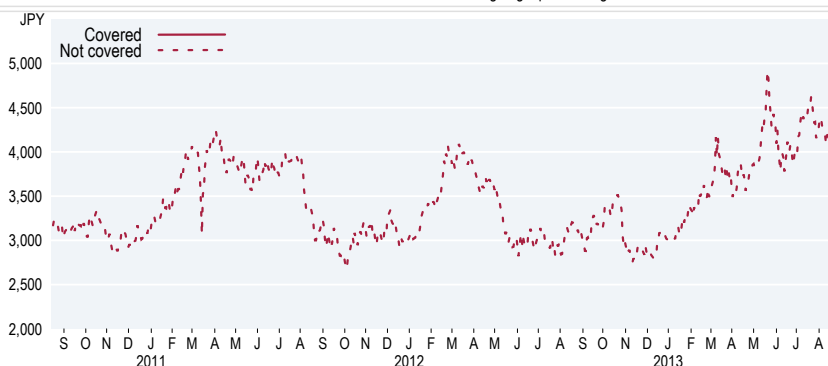
### Japan Petroleum Exploration (1662)

#### Ratings and Target Price History

#### Best Ideas Research

#### Relative Call (3 Month)

Analyst: Takashi Miyazaki



\* Indicates change

Rating/target price changes above reflect Eastern Standard Time

### Inpex (1605)

#### Ratings and Target Price History

#### Fundamental Research

Analyst: Takashi Miyazaki



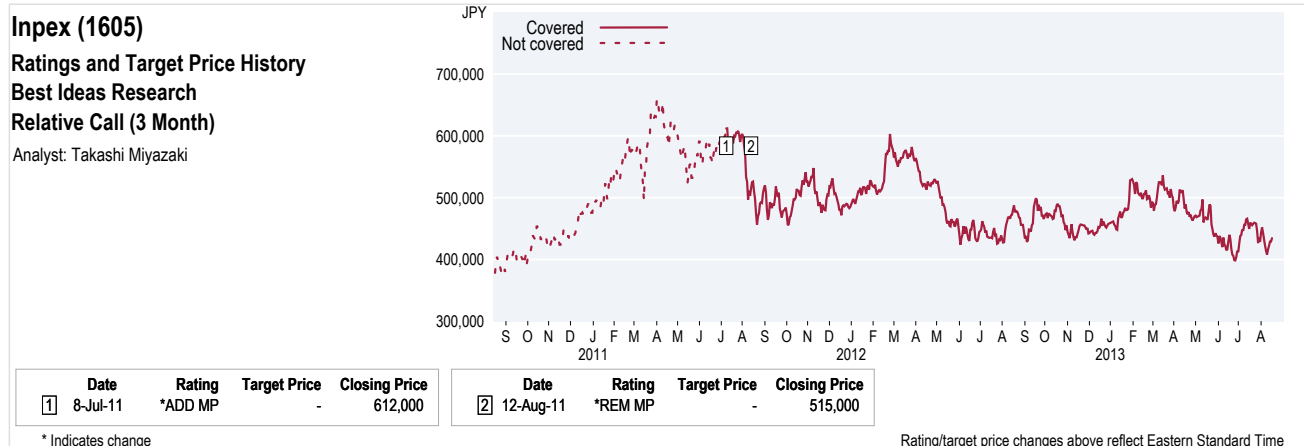
	Date	Rating	Target Price	Closing Price
1	22-Mar-11	*1H	*720,000	600,000
2	30-May-11	1H	*770,000	567,000
3	5-Sep-11	1H	*750,000	480,500

\* Indicates change

	Date	Rating	Target Price	Closing Price
4	7-Oct-11	Stock rating system changed		
5	7-Oct-11	*1	750,000	470,500
6	29-May-12	1	*650,000	464,000

	Date	Rating	Target Price	Closing Price
7	27-Aug-12	1	*630,000	467,000
8	20-Nov-12	1	*600,000	456,500
9	16-Jun-13	1	*610,000	416,500

Rating/target price changes above reflect Eastern Standard Time



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% of companies in each rating category that are investment banking clients

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53%	50%	45%	58%	51%	49%

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